

State of California  
The Resources Agency

DEPARTMENT OF WATER RESOURCES  
Division of Operations and Maintenance

# STATE WATER PROJECT OPERATIONS DATA

For the month of:  
**May 2004**

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Governor  
**State of California**

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**The Resources Agency**

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State of California  
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## **MONTHLY HIGHLIGHTS**

The following highlights are activities or actions that impacted State Water Project operations during the month of May 2004.

Statewide precipitation through May was 90 percent of average for the 2003-2004 water year. Statewide runoff through May was 85 percent for the 2003-2004 water year. Precipitation percentages are used in this report to express historical and regional comparisons. Additional and more specific information is available via the internet at: "[http://cdec.water.ca.gov/snow\\_rain.html](http://cdec.water.ca.gov/snow_rain.html)".

On May 31, total storage in major SWP reservoirs was about 4.37 MAF, compared with about 4.88 MAF at this time in 2003. The average storage in the major SWP reservoirs at the end of May was about 4.51 MAF. End of month storage at Lake Oroville was about 3.04 MAF as compared to 3.52 MAF last year. The State's share of San Luis Reservoir storage was about 683 TAF, as compared with 682 TAF at this time last year. The end of month combined storage in our southern reservoirs was about 640 TAF, compared with about 682 TAF at this time last year.

Through May, SWP water deliveries for 2004 were about 1.38 MAF. This is a combination of project, transfer, and exchange waters. This was about 318 TAF more than that delivered during the same period in 2003.

Antelope Lake continued to spill throughout the month of May. The spill total for May was 3,142 AF.

At 2107 hrs on May 22, Southern Field Division received notification from the Devil Canyon Plant Operator who reported an explosion at the Garden Air Valve Vault on the East Branch Extension. The witness reported to the operator that he observed several people jumping the wall at the site shortly before an explosion. The San Bernardino County Sheriff's Office was notified and responded with ordinance personnel. San Bernardino Valley Municipal Water District Manager also responded but was disallowed access until the investigation was completed. The Federal Bureau of Investigation has been given jurisdiction over the site as of 2240 hrs, with the following damage assessment. There were two pipe bombs that caused damage or destruction to the cathodic protection and the cathodic protection test station. On May 22 San Bernardino Valley Municipal Water District Manager rendered the following update from the explosion at the Garden Air Valve Vault. Company personnel were allowed in to take pictures but were not allowed to touch anything since the investigation is ongoing. The cathodic protection box has been destroyed and a cover to anode has been blown completely out of the compound.

By mutual agreement, the United States Bureau of Reclamation and the California Department of Water Resources declared Balanced Conditions in the Delta effective Monday, May 31.

**Table 1. Antelope Lake**

Daily Operation

(in acre-feet except as noted)

Capacity: 22,566 ac-ft

**May 2004**

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Outflow in cfs						Computed Inflow	
				Regulated Release			Spill	Estimated Evaporation And Seepage	Total Outflow		
				Stream-flow Maint.	Water Supply Contract	Water Right					
Apr 30	5002.70	23,219									
1	5002.72	23,238	19	0	0	0	78	4	82	92	
2	5002.73	23,248	10	0	0	0	81	4	85	90	
3	5002.74	23,257	9	0	0	0	85	4	89	94	
4	5002.73	23,248	-9	0	0	0	83	5	88	83	
5	5002.68	23,201	-47	0	0	0	74	5	79	55	
6	5002.65	23,172	-29	0	0	0	69	5	74	59	
7	5002.62	23,144	-28	0	0	0	64	5	69	55	
8	5002.59	23,116	-28	0	0	0	59	5	64	50	
9	5002.58	23,106	-10	0	0	0	58	5	63	58	
10	5002.61	23,135	29	0	0	0	62	5	67	82	
11	5002.64	23,163	28	0	0	0	67	5	72	86	
12	5002.62	23,144	-19	0	0	0	64	5	69	59	
13	5002.67	23,097	-47	0	0	0	56	5	61	37	
14	5002.55	23,078	-19	0	0	0	53	5	58	48	
15	5002.54	23,069	-9	0	0	0	51	5	56	51	
16	5002.50	23,031	-38	0	0	0	45	5	50	31	
17	5002.48	23,012	-19	0	0	0	42	5	47	37	
18	5002.46	22,994	-18	0	0	0	40	5	45	36	
19	5002.45	22,984	-10	0	0	0	38	5	43	38	
20	5002.44	22,975	-9	0	0	0	37	5	42	37	
21	5002.46	22,994	19	0	0	0	38	5	43	53	
22	5002.45	22,984	-10	0	0	0	37	5	42	37	
23	5002.44	22,975	-9	0	0	0	37	5	42	37	
24	5002.43	22,955	-20	0	0	0	36	5	41	31	
25	5002.41	22,947	-8	0	0	0	33	5	38	34	
26	5002.40	22,937	-10	0	0	0	32	5	37	32	
27	5002.39	22,928	-9	0	0	0	30	5	35	30	
28	5002.43	22,955	27	0	0	0	36	5	41	55	
29	5002.44	22,975	20	0	0	0	37	5	42	52	
30	5002.40	22,937	-38	0	0	0	32	5	37	18	
31	5002.39	22,928	-9	0	0	0	30	5	35	30	
Total cfs-days				- - -	0	0	1,584	152	1,736	1,589	
Total ac-ft				-291	0	0	3,142	301	3,443	3,152	

**Table 2. Frenchman Lake**

## Daily Operation

(in acre-feet except as noted)

Capacity: 55,477 ac-ft

**May 2004**

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Outflow in cfs						Computed Inflow (cfs)	
				Regulated Release			Spill	Estimated Evaporation And Seepage	Total Outflow		
				Stream-flow Maint.	Water Supply Contract	Water Right					
Apr 30	5571.20	32,713									
1	5571.09	32,588	-125	0	83	0	0	0	83	20	
2	5570.92	32,396	-192	0	83	0	0	14	97	0	
3	5570.85	32,317	-79	0	78	0	0	6	84	44	
4	5570.73	32,182	-135	1	67	0	0	6	74	6	
5	5570.62	32,058	-124	2	53	0	0	7	62	-1	
6	5570.56	31,991	-67	1	47	0	0	6	54	20	
7	5570.48	31,902	-89	1	39	0	0	6	46	1	
8	5570.44	31,857	-45	1	33	0	0	6	40	17	
9	5570.40	31,813	-44	1	33	0	0	6	40	18	
10	5570.38	31,790	-23	1	29	0	0	6	36	24	
11	5570.38	31,790	0	0	16	0	0	6	22	22	
12	5570.38	31,790	0	0	10	0	0	6	16	16	
13	5570.35	31,757	-33	1	11	0	0	6	18	1	
14	5570.34	31,746	-11	1	12	0	0	6	19	13	
15	5570.32	31,723	-23	1	12	0	0	6	19	7	
16	5570.31	31,712	-11	1	12	0	0	6	19	13	
17	5570.25	31,646	-66	1	11	0	0	22	34	1	
18	5570.26	31,657	11	0	10	0	0	0	10	16	
19	5570.23	31,623	-34	0	15	0	0	2	17	0	
20	5570.20	31,590	-33	0	22	0	0	0	22	5	
21	5570.18	31,568	-22	0	20	0	0	0	20	9	
22	5570.16	31,546	-22	0	13	0	0	0	13	2	
23	5570.15	31,535	-11	0	11	0	0	5	16	10	
24	5570.10	31,479	-56	0	18	0	0	10	28	0	
25	5570.07	31,446	-33	0	21	0	0	6	27	10	
26	5570.04	31,413	-33	0	20	0	0	6	26	9	
27	5570.04	31,413	0	0	20	0	0	6	26	26	
28	5570.02	31,391	-22	0	20	0	0	6	26	15	
29	5570.00	31,369	-22	0	20	0	0	6	26	15	
30	5569.94	31,302	-67	0	20	0	0	13	33	-1	
31	5569.91	31,271	-31	0	31	0	0	7	38	22	
Total cfs-days				- - -	13	890	0	0	188	1,091	
Total ac-ft				-1,442	26	1,765	0	0	373	2,164	
										364	
										722	

**Table 3. Lake Davis**

Daily Operation  
(in acre-feet except as noted)

Capacity: 84,371 ac-ft

**May 2004**

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Outflow in cfs						Computed Inflow (cfs)	
				Regulated Release			Spill	Estimated Evaporation And Seepage	Total Outflow		
				Stream-flow Maint.	Water Supply Contract	Water Right					
Apr 30	5766.15	52,782									
1	5766.15	52,782	0	10	0	0	0	0	10	10	
2	5766.15	52,782	0	10	0	0	0	0	10	10	
3	5766.12	52,689	-93	10	0	0	0	37	47	0	
4	5766.10	52,627	-62	10	0	0	0	21	31	0	
5	5766.08	52,565	-62	10	0	0	0	21	31	0	
6	5766.06	52,503	-62	10	0	0	0	21	31	0	
7	5766.04	52,441	-62	10	0	0	0	21	31	0	
8	5766.05	52,472	31	10	0	0	0	0	10	26	
9	5766.03	52,411	-61	10	0	0	0	21	31	0	
10	5766.08	52,564	153	10	0	0	0	0	10	87	
11	5766.10	52,627	63	10	0	0	0	0	10	42	
12	5766.09	52,596	-31	10	0	0	0	6	16	0	
13	5766.06	52,503	-93	10	0	0	0	37	47	0	
14	5766.06	52,503	0	10	0	0	0	0	10	10	
15	5766.05	52,472	-31	10	0	0	0	6	16	0	
16	5766.04	52,441	-31	10	0	0	0	6	16	0	
17	5765.99	52,287	-154	10	0	0	0	68	78	0	
18	5765.95	52,164	-123	9	0	1	0	52	62	0	
19	5765.93	52,102	-62	8	0	2	0	21	31	0	
20	5765.93	52,102	0	8	0	2	0	0	10	10	
21	5765.93	52,102	0	8	0	2	0	0	10	10	
22	5765.92	52,072	-30	8	0	2	0	5	15	0	
23	5765.90	52,010	-62	8	0	2	0	21	31	0	
24	5765.89	51,979	-31	8	0	3	0	6	17	1	
25	5765.87	51,918	-61	8	0	3	0	21	32	1	
26	5765.84	51,826	-92	8	0	3	0	36	47	0	
27	5765.82	51,764	-62	7	0	3	0	22	32	0	
28	5765.86	51,887	123	7	0	2	0	1	10	72	
29	5765.85	51,857	-30	7	0	2	0	5	14	-1	
30	5765.82	51,764	-93	7	0	2	0	37	46	-1	
31	5765.80	51,703	-61	7	0	2	0	21	30	-1	
Total cfs-days				---	278	0	33	0	513	823	279
Total ac-ft				-1,079	550	0	64	0	1,018	1,633	554

**Table 4. Lake Oroville**

Daily Operation

(in acre-feet except as noted)

Capacity: 3,537, 580 ac-ft

**May 2004**

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Outflow					Inflow	
				Hyatt Powerplant Generation 1/	Palermo Canal	Evaporation 2/	Spill	Total Outflow	Hyatt Powerplant Pumpback	Computed Inflow 3/
Apr 30	867.41	3,048,779								
	1	867.79	3,054,183	5,404	7,775	26	274	0	8,075	0
	2	868.37	3,062,444	8,261	4,223	26	313	0	4,562	0
	3	868.52	3,064,583	2,139	10,735	27	361	0	11,123	0
	4	868.50	3,064,298	-285	12,033	29	298	0	12,360	0
	5	868.60	3,065,724	1,426	11,321	30	306	0	11,657	0
	6	868.61	3,065,867	143	10,748	30	267	0	11,045	0
	7	868.30	3,061,446	-4,421	14,590	30	212	0	14,832	0
	8	868.67	3,066,723	5,277	5,686	29	204	0	5,919	0
	9	869.15	3,073,579	6,856	3,341	30	243	0	3,614	0
	10	869.10	3,072,864	-715	10,065	30	251	0	10,346	0
	11	868.86	3,069,436	-3,428	13,292	30	173	0	13,495	0
	12	868.57	3,065,296	-4,140	12,702	29	259	0	12,990	0
	13	868.25	3,060,733	-4,563	12,749	30	251	0	13,030	0
	14	867.84	3,054,894	-5,839	13,359	30	281	0	13,670	0
	15	868.25	3,060,733	5,839	2,128	30	250	0	2,408	0
	16	868.48	3,064,012	3,279	4,745	29	234	0	5,008	0
	17	868.15	3,059,308	-4,704	11,128	30	236	0	11,394	0
	18	868.30	3,061,446	2,138	6,574	30	281	0	6,885	0
	19	867.77	3,053,898	-7,548	14,695	30	203	0	14,928	0
	20	867.30	3,047,216	-6,682	11,562	29	242	0	11,833	0
	21	867.12	3,044,659	-2,557	8,990	30	227	0	9,247	0
	22	867.62	3,051,764	7,105	1,383	30	249	0	1,662	0
	23	867.79	3,054,183	2,419	4,503	30	234	0	4,767	0
	24	867.27	3,046,789	-7,394	11,942	29	195	0	12,166	0
	25	867.10	3,044,375	-2,414	10,039	30	234	0	10,303	0
	26	867.05	3,043,665	-710	7,038	30	226	0	7,294	0
	27	866.90	3,041,537	-2,128	7,992	30	242	0	8,264	0
	28	866.69	3,038,558	-2,979	9,986	29	148	0	10,163	0
	29	867.00	3,042,956	4,398	3,732	30	86	0	3,848	0
	30	866.97	3,042,530	-426	6,878	30	288	0	7,196	0
	31	866.92	3,041,820	-710	6,241	30	327	0	6,598	0
<b>Total</b>			-6,959	272,175	912	7,595	0	280,682	0	273,723

1/ Includes bypass flows

2/ Evaporation will be zero for days when there is precipitation or heavy overcast.

3/ Does not include pumpback.

**Table 5. Thermalito Forebay  
Including Diversion Pool and Power Canal**

Capacity: 25,120 ac-ft

Daily Operation  
(in acre-feet except as noted)

**May 2004**

Date	Storage 1/	Storage Change	Inflow			Outflow					Losses (-) And Gains (+)
			Lake Oroville Releases 2/	Kelly Ridge Generation	Thermalito Pumping- Generating Plant Pumpback	Thermalito Pumping- Generating Plant Generation 3/	Butte County 4/	Thermalito Irrigation District	Releases To River 5/	Hyatt Powerplant Pumpback	
Apr 30	22,749										
1	24,149	1,400	7,775	504	0	5,762	0	10	1,253	0	146
2	24,333	184	4,223	462	0	3,208	0	10	1,255	0	-28
3	22,895	-1,438	10,735	504	0	11,546	0	10	1,257	0	136
4	23,147	252	12,033	504	0	10,860	0	10	1,263	0	-152
5	22,932	-215	11,321	514	0	10,685	0	10	1,257	0	-98
6	23,885	953	10,748	506	0	9,144	0	10	1,255	0	108
7	23,782	-103	14,590	436	0	14,013	0	10	1,257	0	151
8	23,579	-203	5,686	506	0	5,189	0	10	1,257	0	61
9	24,162	583	3,341	506	0	2,124	0	10	1,251	0	121
10	23,780	-382	10,065	506	0	9,874	0	10	1,257	0	188
11	23,576	-204	13,292	510	0	12,507	0	10	1,249	0	-240
12	23,555	-21	12,702	514	0	11,880	0	10	1,257	0	-90
13	23,768	213	12,749	514	0	11,826	0	10	1,245	0	31
14	23,673	-95	13,359	514	0	12,658	0	10	1,247	0	-53
15	23,612	-61	2,128	514	0	1,398	0	10	1,253	0	-42
16	24,155	543	4,745	514	0	3,463	0	10	1,246	0	3
17	23,904	-251	11,128	514	0	11,086	0	10	1,247	0	450
18	23,874	-30	6,574	488	0	5,663	0	10	1,250	0	-169
19	23,563	-311	14,695	514	0	14,259	0	11	1,249	0	-1
20	23,832	269	11,562	514	0	10,964	0	11	1,251	0	419
21	23,736	-96	8,990	514	0	9,115	0	11	1,249	0	775
22	24,146	410	1,383	514	0	0	0	11	1,247	0	-229
23	24,164	18	4,503	512	0	3,590	0	11	1,243	0	-153
24	24,313	149	11,942	514	0	10,816	0	11	1,249	0	-231
25	23,849	-464	10,039	512	0	9,886	1	11	1,257	0	140
26	24,106	257	7,038	514	0	6,044	1	11	1,258	0	19
27	24,148	42	7,992	512	0	7,351	1	11	1,255	0	156
28	23,947	-201	9,986	512	0	9,488	1	11	1,257	0	58
29	24,117	170	3,732	512	0	2,664	1	11	1,257	0	-141
30	23,556	-561	6,878	506	0	6,546	1	11	1,259	0	-128
31	23,953	397	6,241	504	0	4,984	1	11	1,263	0	-89
Total		1,204	272,175	15,684	0	248,593	7	323	38,850	0	1,118

1/ Sum of Thermalito Forebay and Diversion Pool.

2/ Sum of releases from Lake Oroville through Hyatt plant, and spill.

3/ Includes Bypass flows at Thermalito.

4/ includes 1 AF to Cal Water, 5 AF to Del Oro, and 1 AF to Lime Saddle Marina.

5/ The sum of the flows from fish barrier dam and the fish hatchery.

**Table 6. Thermalito Afterbay**

Daily Operation

(in acre-feet except as noted)

Capacity: 57,040 ac-ft

**May 2004**

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow		Outflow					Losses (-) and Gains (+)	Total Releases to River 2/
				Thermalito Pumping-Generating Plant Generation 1/	Sutter Butte Canal	Western Canal Lateral	Richvale Canal	Western Canal	Afterbay River Outlet	Thermalito Pumping-Generating Plant Pumpback		
Apr 30	134.16	47,353										
1	133.31	44,028	-3,325	5,762	3,670	12	879	1,984	2,142	0	-400	3,395
2	131.75	38,214	-5,814	3,208	3,690	20	902	2,102	2,142	0	-166	3,397
3	132.48	40,887	2,673	11,546	3,550	29	911	2,241	2,142	0	0	3,399
4	132.95	42,652	1,765	10,860	3,511	27	911	2,281	2,479	0	114	3,742
5	133.28	43,912	1,260	10,685	3,511	26	851	2,301	2,757	0	21	4,014
6	133.15	43,414	-498	9,144	3,451	24	829	2,321	2,757	0	-260	4,012
7	134.19	47,472	4,058	14,013	3,431	22	793	2,360	2,757	0	-592	4,014
8	133.07	43,108	-4,364	5,189	3,431	20	847	2,360	2,777	0	-118	4,034
9	131.11	35,940	-7,168	2,124	3,431	20	891	2,241	2,757	0	48	4,008
10	131.16	36,115	175	9,874	3,372	18	901	2,121	2,777	0	-510	4,034
11	132.17	39,741	3,626	12,507	3,332	17	861	2,102	2,777	0	208	4,026
12	132.83	42,198	2,457	11,880	3,352	14	873	2,121	2,757	0	-306	4,014
13	133.59	45,112	2,914	11,826	3,293	12	780	2,063	2,757	0	-7	4,002
14	134.49	48,671	3,559	12,658	3,233	20	823	2,043	2,777	0	-203	4,024
15	132.53	41,073	-7,598	1,398	3,233	29	847	2,083	2,757	0	-47	4,010
16	131.11	35,940	-5,133	3,463	3,174	27	791	1,982	2,757	0	135	4,003
17	131.66	37,890	1,950	11,086	3,094	20	736	1,837	2,757	0	-692	4,004
18	130.97	35,451	-2,439	5,663	2,936	22	623	1,668	2,777	0	-76	4,027
19	132.70	41,709	6,258	14,259	2,896	29	607	1,583	2,757	0	-129	4,006
20	133.49	44,723	3,014	10,964	2,836	28	710	1,559	2,757	0	-60	4,008
21	133.84	46,090	1,367	9,115	2,836	26	704	1,498	2,757	0	73	4,006
22	131.83	38,503	-7,587	0	2,737	26	629	1,456	2,777	0	38	4,024
23	130.67	34,414	-4,089	3,590	2,698	24	571	1,456	2,757	0	-173	4,000
24	131.57	37,568	3,154	10,816	2,698	26	666	1,575	2,757	0	60	4,006
25	132.14	39,631	2,063	9,886	2,757	29	799	1,630	2,757	0	149	4,014
26	131.58	37,603	-2,028	6,044	2,876	28	829	1,573	2,757	0	-9	4,015
27	131.35	36,785	-818	7,351	2,836	24	831	1,503	2,757	0	-218	4,012
28	131.75	38,214	1,429	9,488	2,797	20	807	1,404	2,757	0	-274	4,014
29	130.25	32,987	-5,227	2,664	2,836	18	776	1,333	2,757	0	-171	4,014
30	129.94	31,952	-1,035	6,546	2,836	20	712	1,333	2,757	0	77	4,016
31	129.01	28,941	-3,011	4,984	2,916	26	690	1,456	2,757	0	-150	4,020
Total		-18,412		248,593	97,250	703	24,380	57,570	83,464	0	-3,638	122,314

1/ Includes Bypass flows at Thermalito.

2/ The sum of the flows from the fish barrier dam, fish hatchery, and afterbay river outlet.

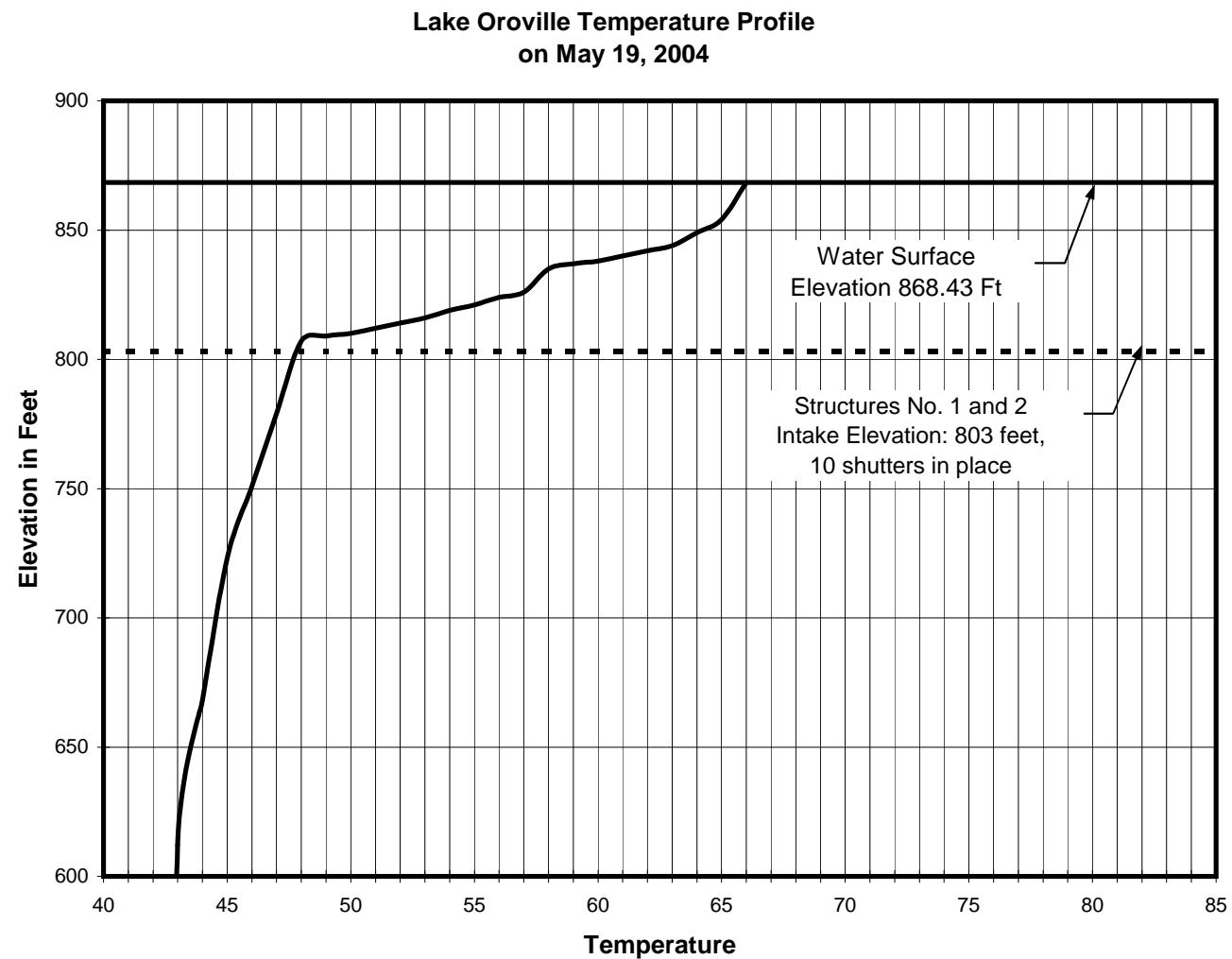
**Table 7. Oroville-Thermalito Complex**

Water Temperature Data

(in degrees Fahrenheit)

**May 2004**

Date	Mean Daily Temperature	
	Thermalito Afterbay Outlet	Fish Hatchery
1	59	51
2	58	51
3	59	52
4	58	53
5	60	53
6	61	53
7	62	53
8	61	54
9	62	54
10	63	54
11	64	54
12	63	55
13	63	55
14	62	54
15	61	55
16	62	55
17	62	55
18	63	54
19	65	55
20	64	56
21	64	55
22	62	55
23	64	56
24	65	55
25	65	55
26	66	56
27	65	55
28	65	55
29	67	55
30	68	56
31	69	56



Note: Water surface elevations on Table 4 are taken at Oroville Dam at midnight and may differ slightly from those shown on this table which are normally taken at mid-day and upstream from Oroville Dam.

**Table 8. North Bay Aqueduct**  
Delta Field Division, Monthly Deliveries

(In acre-feet)

**May 2004**

Reach No.	Operating Pool			Turnout	Total Diversions	Deliveries					
	Beginning and Ending					Table A Amount			Permit		
	No.	Structure	Mile			M & I	Benicia	Vallejo			
1	1	Barker Slough Pumping Plant	0.17	(Into the North Bay Aqueduct)	5,878	1/ 11			960 1,115		
		Travis Surge Tank	8.78								
			8.80	Solano County Water Agency Travis Turnout	278						
			10.54	Solano County Water Agency Fairfield / Vacaville 24"	364						
				Solano County Water Agency Fairfield / Vacaville 42"	1,990						
			17.00	Solano County Water Agency Central Solano	Stub						
2	3A	Cordelia Forebay	21.23			1/ 11			7 880 192		
		Cordelia Pumping Plant & Cordelia Spillway	21.30		3,165						
3B	2	Napa Pipeline	21.33	Solano County Water Agency Vallejo	971	1/ 11			7 880 192		
				Solano County Water Agency Benicia	1,115						
		Cordelia Surge Tank	23.33								
		Creston Surge Tank Connection	25.65								
			26.95	Napa County Flood Control & WCD American Canyon 2	7						
			27.27	Napa County Flood Control & WCD American Canyon 3	0						
		Napa Terminal Tank	27.58	City of Napa	880						
			27.60	Napa County Flood Control & WCD American Canyon 1	192						

1/ Napa Co. FC&WCD Table A water through Solano Co.'s turnout in Reach 3A for delivery to American Canyon.

**Table 9. Delta Field Division Plant Data**

(in acre-feet)

**May 2004**

Date	North Bay Aqueduct		California Aqueduct		South Bay Aqueduct			
	Barker Slough Pumping Plant	Cordelia Pumping Plant	Banks Pumping Plant		South Bay Pumping Plant	Del Valle Pumping Plant		
			Total	SWP		Into Lake	Into Aqueduct	Gravity Flow Through Plant Into Aqueduct
1	160	103	1,794	1,794	680	162	0	0
2	149	98	2,911	2,911	688	170	0	0
3	162	103	2,933	2,933	548	31	0	0
4	179	97	0	0	470	0	0	0
5	205	100	1,487	1,487	470	0	0	0
6	193	96	1,467	1,467	479	0	0	0
7	179	80	1,551	1,551	491	0	0	0
8	202	102	990	990	514	0	0	0
9	190	96	1,829	1,829	466	0	0	37
10	201	101	2,936	2,936	364	0	0	155
11	204	106	2,933	2,933	289	0	0	193
12	201	103	17	17	223	0	0	182
13	210	114	725	725	248	0	0	147
14	217	121	1,458	1,458	369	0	0	0
15	222	123	1,462	1,462	375	0	0	0
16	225	124	1,585	1,585	367	0	0	0
17	224	130	2	2	375	0	0	0
18	233	139	926	926	384	0	0	0
19	203	119	1,635	1,635	387	0	0	0
20	184	103	2,310	2,310	387	0	0	0
21	184	101	1,000	1,000	378	0	0	0
22	189	103	1,005	1,005	379	0	0	0
23	195	103	1,008	1,008	375	0	0	0
24	192	101	1,001	1,001	385	0	0	0
25	201	101	935	935	389	0	0	0
26	187	99	991	991	400	0	0	0
27	64	46	1,840	1,840	380	0	0	0
28	139	52	2,279	2,279	398	0	0	0
29	192	100	1,343	1,343	364	0	0	0
30	196	100	1,325	1,325	375	0	0	0
31	196	101	1,364	1,364	375	0	0	0
Total	5,878	3,165	45,042	45,042	12,772	363	0	714

**Table 10. Clifton Court Forebay**

Daily Operation of Gates

**May 2004**

Date	Time								Amount of inflow in Acre-Feet
	Opened	Closed	Opened	Closed	Opened	Closed	Opened	Closed	
1	1:00	5:10							1,765
2	1:45	8:30							2,882
3	1:00	3:30	6:30	12:15	15:30	19:55			2,925
4	7:40	11:15							185
5	0:01	4:45	7:45	9:40					1,773
6	5:30	8:15	11:50	14:20					2,954
7	0:01	5:20							2,956
8	0:45	2:45							196
9	0:30	7:30							1,778
10	0:21	4:20							2,963
11	0:07	5:13							2,957
12	1:05	1:20							195
13	0:30	4:00							1,767
14	1:30	5:50							2,954
15	2:20	7:55	18:00	19:10					2,210
16	6:12	8:30							1,577
17	6:02	7:42							962
18	10:05	10:43	19:05	22:35					977
19	3:30	4:45	7:15	8:00					936
20	10:30	12:15							778
21	0:01	3:45							814
22	0:01	2:00							875
23	0:01	1:20							985
24	0:30	3:00							975
25	0:45	3:30							976
26	0:30	3:00							941
27	0:40	2:30							946
28	0:45	2:20							952
29	0:30	1:45							935
30	4:30	5:55	13:30	18:00					874
31	5:00	10:30							1,278
Total inflow for the month in AF:									46,241

**Table 11. Governor Edmund G. Brown California Aqueduct**  
 Delta Field Division, Monthly Deliveries

(In acre-feet)

**May 2004**

Reach No.	Operating Pool			Turnout	Total Diver-sions	Deliveries						
	Beginning and Ending					Table A Amount	USBR	Local	Loan Water	Dry Year Purchase		
	No.	Structure	Mile									
1	Banks Pumping Plant	3.32			45,042	9	49					
	South Bay Pumping Plant	4.49	Bethany Reservoir Inlet		12,772							
	Check No. 1	5.95										
		8.08	Alameda Co. Zone 7 WA Mountain House Golf Course		9							
	Check No. 2	12.01										
		12.47	Musco Olive		49							
	Check No. 3	18.29										
		22.16	Tracy Golf & Country Club		0							
	Check No. 4	23.99										
	Check No. 5	29.73										
	Check No. 6	34.24										
2A		35.22	Turlock Fruit Company Inflow		0							
	Check No. 7	39.91										
		42.46	Oak Flat Water District-A		114	114	104	256	187	274		
		42.9	Western Hills WD		104							
		43.81	Oak Flat Water District-B		256							
		44.64	Oak Flat Water District-C		187							
	Check No. 8	45.97										
		46.18	Oak Flat Water District-D		274							
2B	9		Oak Flat Totals:		831	831	0	0	0	0		
		Check No. 9	51.3									
	10	Check No. 10	56.86									
	11	Check No. 11	61.4									
	12		66.14	Veteran's Cemetery	11		11					
		Check No. 12	66.71		27,639							

**Table 12. South Bay Aqueduct**  
Delta Field Division, Monthly Deliveries

(In acre-feet)

**May 2004**

Reach No.	Operating Pool			Turnout	Total Diversions	Deliveries						
	Beginning and Ending					Table A Amount	Purchase Pool A	Purchase Pool B	Local	Recreation		
	No.	Structure	Mile									
1	1	South Bay Pumping Plant	0.00	(into South Bay Aqueduct)	12,772	4						
			3.17	Granite - Vasco Rd. (Temp.)	0							
			3.18	Oakland Scavenger Zone 7	4							
		Check No. 1	3.91									
2	2	Check No. 2	5.21			1,458						
			7.21	Zone 7 Altamont	0							
		Check No. 3	9.49	Zone 7 Patterson Inflow Exchange	0							
4	6		Zone 7 Patterson Project Water	1,458		1,458						
		4	Check No. 4	10.68								
		5	Check No. 5	12.29								
			13.55	Zone 7 Wente #1	116		116					
			14.16	Zone 7 Wente #2	0							
			14.31	Ising Project Water	27							
		Check No. 6	14.65									
			14.78	Zone 7 Arroyo Mocho Project Water	401	401						
		Check No. 7	16.38									
			16.57	Zone 7 Wente #3	0							
			16.63	Zone 7 Wente #4	31							
5	8		16.69	Zone 7 Norman Nursery	3	31						
			16.70	Zone 7 Concannon Project Water	24							
		Del Valle Branch Pipeline Junction	18.63	(Pumped into Lake Del Valle)	363							
				(Flow into South Bay Aqueduct)	714							
				Arroyo Valle #1 & #2 Project Water	442		442					
				Arroyo Valle #1 & #2 Inflow Exchange	0							
				Lake Del Valle Recreation	19							
				Zone 7 Wente #5	74							
6	8		19.20	So. Livermore Project	2,364	2,364						
				So. Livermore Inflow Released	0							
				So. Livermore Stored Exchanged	0							
			19.21	Zone 7 - Kalthrof Detjens	128							
7	8	La Costa Tunnel	22.50	ACWD Vallecitos Project Water	0	128						
			25.97	City of San Francisco San Antonio	0							
8	8	Mission Tunnel	28.97	ACWD - Bayside 1 & 2 Project Water:	0	1,222						
				Storage Exchange	1,222							
9	8	Santa Clara Pipeline	35.86	Storage Release S.C.V.W.D. Meter	713	6,066						
					6,066							

**Table 13. Lake Del Valle**

Daily Operation

(in acre-feet except as noted)

Capacity: 77,106 ac-ft

**May 2004**

Date	Water Surface Elevation (feet)	Storage	Storage Change	Inflow		Outflow					Precipitation (inches)
				Natural 1/	From South Bay Aqueduct	Arroyo Valle	South Bay Aqueduct	Recreation Deliveries 2/	Evaporation	Total Outflow	
Apr 30	704.59	41,049									
1	704.79	41,193	144	-5	162	0	0	0	13	13	0.00
2	705.00	41,345	152	-5	170	0	0	0	13	13	0.00
3	705.07	41,395	50	33	31	0	0	0	14	14	0.00
4	705.06	41,388	-7	12	0	0	0	0	19	19	0.00
5	705.03	41,367	-21	-12	0	0	0	0	9	9	0.00
6	705.01	41,352	-15	-4	0	0	0	0	11	11	0.00
7	705.00	41,345	-7	2	0	0	0	0	9	9	0.00
8	704.98	41,330	-15	-5	0	0	0	0	10	10	0.00
9	704.92	41,287	-43	5	0	0	37	0	11	48	0.00
10	704.69	41,121	-166	0	0	0	155	0	11	166	0.00
11	704.43	40,934	-187	18	0	0	193	0	12	205	0.00
12	704.16	40,740	-194	-4	0	0	182	0	8	190	0.00
13	703.96	40,597	-143	15	0	0	147	1	10	158	0.00
14	703.95	40,590	-7	5	0	0	0	1	11	12	0.00
15	703.93	40,576	-14	2	0	0	0	1	15	16	0.00
16	703.91	40,561	-15	-3	0	0	0	1	11	12	0.00
17	703.89	40,547	-14	-3	0	0	0	1	10	11	0.00
18	703.88	40,540	-7	2	0	0	0	1	8	9	0.00
19	703.85	40,518	-22	-13	0	0	0	1	8	9	0.00
20	703.84	40,511	-7	2	0	0	0	1	8	9	0.00
21	703.82	40,497	-14	0	0	0	0	1	13	14	0.00
22	703.80	40,483	-14	-6	0	0	0	1	7	8	0.00
23	703.79	40,476	-7	2	0	0	0	1	8	9	0.00
24	703.76	40,454	-22	-10	0	0	0	1	11	12	0.00
25	703.75	40,447	-7	6	0	0	0	1	12	13	0.00
26	703.73	40,433	-14	-1	0	0	0	1	12	13	0.00
27	703.73	40,433	0	13	0	0	0	1	12	13	0.00
28	703.69	40,404	-29	-18	0	0	0	1	10	11	0.07
29	703.68	40,397	-7	3	0	0	0	1	9	10	0.00
30	703.67	40,390	-7	5	0	0	0	1	11	12	0.00
31	703.64	40,369	-21	-5	0	0	0	1	15	16	0.00
Total				-680	31	363	0	714	19	341	1,074
1/ Total inflow from stream gaging station above Lang Canyon and accretions/depletions.											
2/ To East Bay Regional Park District.											
NR=No Records											

**Table 14. Consolidated State-Federal O'Neill Forebay**

Daily Operations

**May 2004**

United States

Department of the Interior

Bureau of Reclamation

Central Valley Project

Capacity 56,430 ac-ft

State of California

The Resources Agency

Department of Water Resources

State Water Project

Date	Water Surface Elevation (in feet)	Storage (ac-ft)	Storage Change (ac-ft)	Inflow (cfs)				Outflow (cfs)				Computed Losses (-) Gains (+) (cfs)
				Pump In 1/	O'Neill Pumping Generating Plant (Pumped)	Gianelli Pumping Generating Plant (Generation)	California Aqueduct	O'Neill Pumping Generating Plant (Generation)	Gianelli Pumping Generating Plant (Pumped)	Dos Amigos Pumping Plant	Deliv-eries 2/	
Apr 30	220.53	44,531										
1	220.72	45,027	496	0	0	9,055	468	1,743	0	7,330	26	-174
2	219.00	40,584	-4,443	0	0	6,632	376	1,933	0	7,321	26	32
3	220.60	44,714	4,130	0	0	8,353	961	1,959	0	5,235	26	-12
4	219.80	42,635	-2,079	0	0	7,341	0	2,033	0	6,183	26	-147
5	219.59	42,093	-542	0	0	8,417	262	1,793	0	6,876	26	-257
6	219.69	42,351	258	0	0	8,418	589	2,354	0	6,444	17	-62
7	221.22	46,337	3,986	0	0	11,201	314	2,475	0	6,903	17	-110
8	221.77	47,782	1,445	0	0	9,160	280	2,547	0	5,835	17	-312
9	218.95	40,457	-7,325	0	0	3,281	689	1,842	0	4,991	17	-813
10	221.96	48,282	7,825	0	0	9,656	1,199	2,321	0	4,410	17	-162
11	220.99	45,734	-2,548	0	0	6,704	1,066	2,191	0	6,935	17	88
12	220.70	44,975	-759	0	0	8,122	0	1,906	0	6,430	18	-151
13	221.50	47,073	2,098	0	0	9,917	62	1,932	0	6,881	24	-84
14	221.07	45,944	-1,129	0	0	8,697	617	2,241	0	7,617	24	-1
15	221.10	46,023	79	0	0	9,600	391	2,317	0	7,297	24	-313
16	220.11	43,437	-2,586	0	0	8,457	728	2,257	0	8,086	24	-122
17	220.91	45,525	2,088	0	0	8,820	9	2,084	0	5,624	24	-44
18	220.74	45,080	-445	0	0	8,087	9	1,665	0	6,652	24	21
19	220.77	45,158	78	0	0	8,762	628	1,364	0	7,983	29	25
20	219.62	42,170	-2,988	0	0	8,494	637	1,405	0	8,754	20	-458
21	220.69	44,949	2,779	0	0	10,467	230	1,385	0	7,751	20	-140
22	221.15	46,154	1,205	0	0	10,169	388	1,381	0	8,464	20	-84
23	220.14	43,515	-2,639	0	0	7,380	346	1,444	0	7,492	20	-100
24	220.31	43,957	442	0	0	9,393	241	1,511	0	7,758	20	-122
25	219.64	42,222	-1,735	0	0	8,405	568	1,784	0	7,788	20	-256
26	218.81	40,103	-2,119	0	0	10,017	100	2,092	0	9,005	24	-64
27	219.17	41,017	914	0	0	10,866	806	2,332	0	8,730	38	-111
28	219.60	42,119	1,102	0	0	11,704	610	1,815	0	9,896	38	-9
29	220.00	43,152	1,033	0	0	10,517	640	1,064	0	9,581	38	47
30	219.30	41,349	-1,803	0	195	8,160	325	480	0	9,104	38	33
31	219.50	41,862	513	0	614	8,229	395	118	0	8,614	38	-209
Total			-2,669	0	809	272,481	13,934	55,768	0	227,970	757	-4,071
Mean cfs			---	0	26	8,790	449	1,799	0	7,354	24	-131
Acre-feet			-2,669		1,604	540,468	27,639	110,619	0	452,177	1,501	-8,083

1/ Pump-in located at Mile 79.67R.

2/ Includes 30 AF delivered to DFG at O'Neill Forebay, 19 AF to Parks and Recreation, and 1,452 AF to San Luis Water District.

**Table 15. Consolidated State-Federal San Luis Reservoir**

Daily Operations

**May 2004**

United States

Department of the Interior

Bureau of Reclamation

Central Valley Project

Capacity: 2,027,835 ac-ft

State of California

The Resources Agency

Department of Water Resources

State Water Project

Date	Water Surface Elev. (in feet)	Storage (ac-ft)	Storage Change (ac-ft)	Inflow (cfs)	Outflow (cfs)			Computed Losses (-) Gains (+) (cfs)
				Gianelli Pumping Generating Plant (Pumped)	Gianelli Pumping Generating Plant (Generation)	Pacheco Tunnel 1/	Parks and Rec. Del.	
Apr 30	522.08	1,768,145						
1	520.58	1,750,002	-18,143	0	9,055	190	0	98
2	519.48	1,736,739	-13,263	0	6,632	209	0	154
3	518.08	1,719,908	-16,831	0	8,353	191	0	58
4	516.81	1,704,689	-15,219	0	7,341	220	0	-112
5	515.37	1,687,490	-17,199	0	8,417	207	0	-47
6	513.96	1,670,707	-16,783	0	8,418	201	0	158
7	512.04	1,647,946	-22,761	0	11,201	218	0	-56
8	510.56	1,630,475	-17,471	0	9,160	233	0	585
9	509.90	1,622,705	-7,770	0	3,281	239	0	-397
10	508.28	1,603,685	-19,020	0	9,656	211	0	278
11	507.02	1,588,946	-14,739	0	6,704	228	0	-499
12	505.60	1,572,390	-16,556	0	8,122	222	0	-3
13	503.88	1,552,417	-19,973	0	9,917	304	0	151
14	502.37	1,534,954	-17,463	0	8,697	294	0	187
15	500.66	1,515,259	-19,695	0	9,600	318	0	-11
16	499.15	1,497,940	-17,319	0	8,457	337	0	62
17	497.57	1,479,891	-18,049	0	8,820	323	0	43
18	496.09	1,463,051	-16,840	0	8,087	337	0	-66
19	494.50	1,445,033	-18,018	0	8,762	328	0	6
20	492.98	1,427,879	-17,154	0	8,494	336	0	182
21	491.08	1,406,534	-21,345	0	10,467	327	0	33
22	489.25	1,386,078	-20,456	0	10,169	327	0	183
23	487.87	1,370,719	-15,359	0	7,380	302	0	-61
24	486.16	1,351,767	-18,952	0	9,393	262	0	100
25	484.49	1,333,344	-18,423	0	8,405	317	0	-566
26	482.68	1,313,473	-19,871	0	10,017	316	0	315
27	480.66	1,291,413	-22,060	0	10,866	310	0	54
28	478.51	1,268,071	-23,342	0	11,704	302	0	238
29	476.53	1,246,700	-21,371	0	10,517	290	0	33
30	475.01	1,230,365	-16,335	0	8,160	295	0	220
31	473.44	1,213,592	-16,773	0	8,229	259	2	34
Total			-554,553	0	272,481	8,453	2	1,354
Mean cfs			---	0	8,790	273	0	44
Acre-feet			-554,553	0	540,468	16,769	4	2,688

1/ Pacheco Tunnel, San Felipe Split; Santa Clara: 12,961 AF, San Benito: 3,808 AF.

**Table 16. San Luis Field Division Plant Data**

(in acre-feet)

**May 2004**

Date	Dos Amigos Pumping Plant		Gianelli Pumping - Generating Plant				San Felipe Project
	Total Pumping	SWP Pumping 1/ 2/	Total Generation	SWP Generation 1/ 2/	Total Pumping	SWP Pumping 1/ 2/	Federal
1	14,539	10,315	17,961	9,776	0	0	377
2	14,521	10,245	13,154	4,768	0	0	415
3	10,384	6,185	16,568	9,035	0	0	379
4	12,263	7,638	14,561	7,687	0	0	437
5	13,639	8,203	16,696	5,654	0	0	411
6	12,781	7,400	16,698	8,100	0	0	399
7	13,693	8,267	22,218	8,756	0	0	432
8	11,573	6,164	18,168	8,767	0	0	462
9	9,899	5,219	6,507	1,003	0	0	474
10	8,747	3,461	19,153	2,433	0	0	419
11	13,755	8,357	13,297	5,080	0	0	452
12	12,753	7,357	16,109	7,674	0	0	440
13	13,648	8,234	19,671	9,479	0	0	603
14	15,109	9,705	17,251	6,546	0	0	583
15	14,474	9,120	19,042	8,866	0	0	631
16	16,038	10,729	16,775	8,776	0	0	668
17	11,155	5,836	17,494	9,455	0	0	641
18	13,195	9,396	16,041	8,111	0	0	668
19	15,835	11,994	17,379	9,181	0	0	651
20	17,363	13,562	16,847	8,943	0	0	666
21	15,375	11,496	20,762	13,571	0	0	649
22	16,789	12,918	20,171	12,316	0	0	649
23	14,861	8,766	14,638	8,863	0	0	599
24	15,388	9,243	18,632	10,659	0	0	520
25	15,447	9,449	16,671	8,338	0	0	629
26	17,861	11,918	19,868	8,913	0	0	627
27	17,316	11,332	21,553	11,683	0	0	615
28	19,629	13,590	23,215	13,782	0	0	599
29	19,004	12,913	20,861	10,518	0	0	575
30	18,058	12,019	16,185	10,233	0	0	585
31	17,085	11,062	16,322	9,348	0	0	514
<b>Total</b>	<b>452,177</b>	<b>292,093</b>	<b>540,468</b>	<b>266,314</b>	<b>0</b>	<b>0</b>	<b>16,769</b>

1/ Negative values may appear in SWP columns and indicate a mismatch of scheduled CVP energy and actual pumping;  
adjustments to SWP water shares are made to balance the mismatch.

2/ Provisional, subject to change.

**Table 17. Consolidated State-Federal Los Banos Reservoir**

Daily Operations

May 2004

United States

Department of the Interior

Bureau of Reclamation

Central Valley Project

Capacity 34,560 ac-ft

State of California

The Resources Agency

Department of Water Resources

State Water Project

Date	Water Surface Elev. (in feet)	Storage (ac-ft)	Storage Change (ac-ft)	Estimated Inflow (cfs)	Estimated Outflow (cfs)		Computed Losses (-) Gains (+) (ac-ft)
					Spill	Outlet	
Apr 30	327.40	20,388					
1	327.39	20,384	-4	0	0	0	-4
2	327.39	20,384	0	0	0	0	0
3	327.37	20,374	-10	0	0	0	-10
4	327.35	20,365	-9	0	0	0	-9
5	327.32	20,351	-14	0	0	0	-14
6	327.30	20,342	-9	0	0	0	-9
7	327.26	20,323	-19	0	0	0	-19
8	327.25	20,318	-5	0	0	0	-5
9	327.24	20,314	-4	0	0	0	-4
10	327.20	20,295	-19	0	0	0	-19
11	327.17	20,281	-14	0	0	0	-14
12	327.15	20,272	-9	0	0	0	-9
13	327.13	20,262	-10	0	0	0	-10
14	327.12	20,258	-4	0	0	0	-4
15	327.10	20,248	-10	0	0	0	-10
16	327.07	20,234	-14	0	0	0	-14
17	327.02	20,211	-23	0	0	0	-23
18	327.01	20,206	-5	0	0	0	-5
19	326.99	20,197	-9	0	0	0	-9
20	326.96	20,183	-14	0	0	0	-14
21	326.94	20,174	-9	0	0	0	-9
22	326.92	20,165	-9	0	0	0	-9
23	326.90	20,155	-10	0	0	0	-10
24	326.87	20,141	-14	0	0	0	-14
25	326.85	20,132	-9	0	0	0	-9
26	326.84	20,128	-4	0	0	0	-4
27	326.82	20,118	-10	0	0	0	-10
28	326.81	20,114	-4	0	0	0	-4
29	326.79	20,104	-10	0	0	0	-10
30	326.77	20,095	-9	0	0	0	-9
31	326.77	20,095	0	0	0	0	0
Total			-293	0	0	0	-293
Mean cfs			---	0	0	0	---
Acre-feet			-293	0	0	0	-293

**Table 18. Consolidated State-Federal Little Panoche Reservoir**

Daily Operations

May 2004

United States

Department of the Interior

Bureau of Reclamation

Central Valley Project

State of California

The Resources Agency

Department of Water Resources

State Water Project

Capacity: 5,580 ac-ft

Date	Water Surface Elev. (in feet)	Storage (ac-ft) 1/	Storage Change (ac-ft) 1/	Estimated Inflow (cfs)	Estimated Outflow (cfs)		Computed Losses (-) Gains (+) (ac-ft) 1/
					Spill	Outlet	
Apr 30	602.40	815					
1	602.45	818	3	3	0	1	
2	602.40	815	-3	0	0	0	
3	Not Observed			0	0	0	
4	Not Observed			0	0	0	
5	Not Observed			0	0	0	
6	Not Observed			0	0	0	
7	Not Observed			0	0	0	
8	602.35	812	-3	0	0	1	
9	602.30	809	-3	0	0	1	
10	602.30	809		1	0	1	
11	602.30	809		1	0	1	
12	602.30	809		1	0	1	
13	Not Observed			1	0	1	
14	602.05	794	-15	0	0	1	
15	602.30	809	15	8	0	0	
16	602.30	809		0	0	0	
17	601.95	789	-20	0	0	1	
18	601.95	789		1	0	1	
19	601.90	786	-3	0	0	1	
20	601.90	786		1	0	1	
21	601.85	783	-3	0	0	1	
22	601.85	783		1	0	1	
23	601.80	780	-3	0	0	1	
24	Not Observed			1	0	1	
25	Not Observed			1	0	1	
26	601.80	780		1	0	1	
27	601.80	780		1	0	1	
28	601.75	777		0	0	1	
29	601.75	777		1	0	1	
30	Not Observed			1	0	1	
31	601.70	775		0	0	1	
Total			-35	24	0	23	---
Mean cfs			---	1	0	1	---
Acre-feet			-35	48	0	46	-37

1/ Not available on a daily basis

**Table 19a. Governor Edmund G. Brown California Aqueduct**  
 San Luis Field Division, Monthly Deliveries

(In acre-feet)

**May 2004**

Reach No.	Operating Pool			Turnout	Total Diversions	Deliveries					
	Beginning and Ending					USBR	Transfer	DWR Recreation	USBR Recreation		
	No.	Structure	Mile								
2B	12	Check No. 12	66.71		27,639						
3A		San Luis Reservoir		Department of Parks and Recreation	2	12,961		1	1		
				San Felipe Division Santa Clara Water District	12,961						
				San Felipe Division San Benito Water District	3,808						
3	13	O'Neill Forebay	70.85	Department of Parks and Recreation	19			10	9		
				Cattle Program							
				Department of Fish & Game	30						
			70.91 Thru 85.08	San Luis Water District	1,452	1,452		17	13		
				(Floodwater Inflow)	0						
				Reach 3 Subtotal:	1,501	1,452	0	27	22		
		Dos Amigos Pumping Plant	86.73		452,177						
4	14		89.03			9,087					
			Thru 94.06	San Luis Water District	9,087						
			89.66				2,236				
			Thru 89.67	Pacheco Water District	2,236						
			89.68			41					
			89.70	Panoche Water District	41						
		Check No. 14	95.06	City of Dos Palos	163	163					
			98.15				1,224				
			Thru 104.20	San Luis Water District	1,224						
			96.15				6,914				
			Thru 102.64	Panoche Water District	6,914						
			(Floodwater Inflow)	0							
	15		102.64	Broadview Water District	1	18,137					
			105.22								
			Thru 108.64	Westlands Water District	18,137						
			Check No. 15								
			108.50								
				San Felipe Division Total:	16,769	16,769	0	0	0		
				Pacheco Water District Total:	2,236	2,236	0	0	0		
				Broadview Water District Total:	1	1	0	0	0		
				City of Dos Palos Total:	163	163	0	0	0		
				SLWD Reach 4 Subtotal:	11,763	11,763	0	0	0		
				Panoche Water District Total:	6,955	6,955	0	0	0		
				SLWD Total:	11,763	11,763	0	0	0		
				Westlands WD Reach 4 Subtotal:	18,137	18,137	0	0	0		

**Table 19b. Governor Edmund G. Brown California Aqueduct**

San Luis Field Division, Monthly Deliveries (Continued)

(In acre-feet)

**May 2004**

Reach No.	Operating Pool			Turnout	Total Diversions	Deliveries					
		Beginning and Ending				USBR	Transfer	DWR Recreation	USBR Recreation		
		No.	Structure	Mile							
5	16		110.52	(Reverse flow, Kings River)	0	21,558	21,558	21,558			
				Thru	Westlands Water District						
				122.05	Department of Fish and Game						
		Check No. 16	122.07								
	17		124.18	Westlands Water District	21,743	21,743	21,743	21,743			
				Thru							
		Check No. 17	132.95								
	18		133.81	Westlands Water District	20,877	20,877	20,877	20,877			
			Thru								
			142.61								
		Pleasant Valley Pumping Plant	143.16	Westlands Water District	14,662	14,662	14,662	14,662			
			143.16	City of Coalinga	761						
		Check No. 18	143.23								
				Westlands WD Reach 5 Subtotal:	78,840	78,840	0	0	0		
6	19		145.26	Westlands Water District	27,375	27,375	27,375	27,375			
			Thru								
			151.19	Westlands Water District Lemoore Naval Air Station	398		1/ 398				
				City of Huron	6						
		Check No. 19	155.64								
				Westlands WD Reach 6 Subtotal:	27,375	27,375	0	0	0		
7	20		156.34	Westlands Water District	16,886	16,886	16,886	16,886			
			156.4				107				
			Thru	Westlands Water District	16,886						
			163.69	City of Huron	107						
		Check No. 20	164.69								
	21		164.79	City of Avenal	266	266	266	266			
			167.04								
			Thru	Westlands Water District	5,313						
			171.67								
		Check No. 21	172.40		287,626						
				Reach 7 Total:	22,465	22,465	0	0	0		
				Westlands WD Total:	146,551	146,551	0	0	0		
				City of Coalinga Total:	761	761	0	0	0		
				City of Huron Total:	113	113	0	0	0		
				City of Avenal Total:	266	266	0	0	0		
Total San Luis Field Division Deliveries:					186,027	185,578	398	28	23		

1/ County of Kings transferred 398 AF of Table A water to Westlands Water District

**Table 20. Consolidated State-Federal San Luis Canal 1/**

Daily Operations

**May 2004**

United States

Department of the Interior

Bureau of Reclamation

Central Valley Project

State of California

The Resources Agency

Department of Water Resources

State Water Project

Date	Storage In Canal (ac-ft)	Storage Change (ac-ft)	Inflow (cfs)		Outflow (cfs)				Computed Losses (-) Gains (+) (cfs)
			Non- Project	Dos Amigos Pumping Plant	San Luis Water District 2/	Panoche Water District	Westlands Water District 3/	Flow Past Check 21	
Apr 30	29,354								
1	29,188	-166	0	7,330	203	79	2,301	4,845	14
2	30,166	978	0	7,321	203	79	2,301	4,448	203
3	28,953	-1,213	0	5,235	203	79	2,301	3,467	203
4	28,785	-168	0	6,183	203	79	2,301	3,555	-130
5	29,142	357	0	6,876	206	80	2,303	3,889	-218
6	28,703	-439	0	6,444	165	79	2,097	4,037	-288
7	29,560	857	0	6,903	165	79	2,097	3,806	-324
8	29,343	-217	0	5,835	165	79	2,097	3,576	-27
9	30,384	1,041	0	4,991	165	79	2,097	3,194	1,069
10	29,711	-673	0	4,410	165	79	2,097	2,822	413
11	29,470	-241	0	6,935	165	79	2,097	4,772	57
12	28,527	-943	0	6,430	167	82	2,101	4,534	-22
13	27,910	-617	0	6,881	193	140	2,174	4,810	125
14	28,696	786	0	7,617	193	140	2,174	4,702	-12
15	28,835	139	0	7,297	193	140	2,174	4,857	137
16	29,903	1,068	0	8,086	193	140	2,174	5,408	368
17	28,719	-1,184	0	5,624	193	140	2,174	3,982	268
18	27,756	-963	0	6,652	193	140	2,174	4,619	-11
19	28,276	520	0	7,983	197	142	2,076	4,923	-383
20	28,984	708	0	8,754	228	111	2,515	5,449	-94
21	28,670	-314	0	7,751	228	111	2,515	5,041	-15
22	29,586	916	0	8,464	228	111	2,515	5,078	-70
23	29,836	250	0	7,492	228	111	2,515	4,768	256
24	29,822	-14	0	7,758	228	111	2,515	4,899	-12
25	28,753	-1,069	0	7,788	228	111	2,515	5,202	-271
26	29,465	712	0	9,005	230	116	2,516	5,309	-475
27	28,571	-894	0	8,730	256	158	3,149	5,791	173
28	29,640	1,069	0	9,896	256	158	3,149	5,830	36
29	29,645	5	0	9,581	256	158	3,149	5,990	-25
30	30,025	380	0	9,104	256	158	3,149	5,607	258
31	29,021	-1,004	0	8,614	256	158	3,149	5,799	242
Total		-333	0	227,970	6,408	3,506	74,661	145,009	1,447
Mean cfs		---	0	7,354	207	113	2,408	4,678	47
Acre-feet		-333	0	452,177	12,710	6,955	148,090	287,626	2,871

1/ San Luis Canal includes Pools 14 through 21 of the California Aqueduct.

2/ Includes 1,538 AF AG & 1 AF M&I to Pacheco W.D. 163 AF to the City of Dos Palos, and 11,008 AF to San Luis WD.

3/ Includes 113 AF to the City of Huron, 266 AF to the City of Avenal, 761 AF to the City of Coalinga, 1 AF to Broadview WD, 398 AF to Lemoore Naval Air Station at 29L and 30L, and 146,551 AF to Westlands WD.

**Table 21. San Joaquin Field Division Plant Data**

(in acre-feet)

**May 2004**

23

Date	Coastal Aqueduct					California Aqueduct			
	Las Perillas Pumping Plant	Badger Hill Pumping Plant	Devil's Den Pumping Plant	Bluestone Pumping Plant	Polonio Pass Pumping Plant	Buena Vista Pumping Plant	Teerink Pumping Plant	Chrisman Pumping Plant	Edmonston Pumping Plant
1	586	586	102	96	102	6,682	6,261	5,843	5,697
2	513	513	163	147	155	5,941	5,867	5,458	5,401
3	438	438	94	88	96	4,958	4,781	4,392	4,236
4	490	490	138	127	130	4,722	4,253	3,883	3,599
5	500	500	129	120	124	5,057	4,656	4,285	4,111
6	441	441	150	140	143	4,974	4,529	4,161	3,998
7	480	480	130	126	131	5,467	5,053	4,628	4,477
8	644	644	175	157	167	4,129	3,879	3,569	3,492
9	435	435	124	114	126	4,017	3,741	3,417	3,357
10	391	391	89	84	88	3,494	3,297	2,967	2,878
11	461	461	88	81	89	7,108	7,086	6,530	7,050
12	504	504	103	96	101	6,561	6,299	5,852	5,697
13	459	459	101	93	99	6,705	6,572	6,109	5,962
14	410	410	97	91	99	7,002	6,689	6,215	6,099
15	377	377	98	91	96	7,148	6,757	6,405	6,441
16	222	222	131	118	156	8,274	8,144	7,765	7,736
17	289	289	77	73	79	6,146	6,123	5,738	5,638
18	444	444	98	92	96	6,542	6,165	5,754	5,593
19	426	426	105	97	103	7,523	7,185	6,682	6,757
20	453	453	98	94	99	7,602	7,301	6,764	6,663
21	442	442	98	91	98	7,670	7,228	6,776	6,520
22	425	425	136	129	130	7,330	7,202	6,824	6,825
23	239	239	173	163	169	7,330	7,266	6,886	6,822
24	338	338	103	97	99	7,284	7,314	6,850	6,784
25	483	483	144	135	142	7,384	7,158	6,573	6,419
26	458	458	112	107	116	7,214	7,040	6,540	6,450
27	467	467	136	128	134	7,405	7,072	6,519	6,441
28	396	396	131	126	125	7,834	7,329	6,848	6,710
29	549	549	142	136	137	7,457	7,070	6,671	6,691
30	433	433	161	149	157	7,036	6,912	6,712	6,581
31	442	442	123	114	124	7,389	7,148	6,768	6,580
Total	13,635	13,635	3,749	3,500	3,710	201,385	193,377	180,384	177,705

**Table 22a. Governor Edmund G. Brown California Aqueduct**  
San Joaquin Field Division, Monthly Deliveries

(In acre-feet)

**May 2004**

Reach No.	Operating Pool			Turnout	Total Diversions	Deliveries						
	Beginning and Ending					Table A Amount	USBR	Purchase Pool A	Purchase Pool B	Dry Year Purchase		
	No.	Structure	Mile									
7	21	Check No. 21	172.40		287,626							
8C	22		172.66	Empire West Side Irrig. Dist. TL - A	0	500	3,739					
				County of Kings TL - A	500							
				TLBWS D TL-A	3,739							
			175.18	DRWD - 1	268	268						
			177.54	DRWD - 1B	175	175						
			180.64	TLBWS D - C	0	315						
			180.65	DRWD - 1A	315	2,548						
			182.99	DRWD - 2	2,548	7,105						
			183.00	Tulare Lake Basin WSD TL - B	7,105	3						
				DRWD - Paramount	3	1,475						
8D			184.00	Coastal Branch	13,635	4,784	0	0	0	0		
			184.78	Dudley Ridge Water Dist. DRWD - 3	1,475	10,844	0	0	0	0		
				Dudley Ridge Reach 8D Total:	4,784							
				Tulare Lake Basin WSD Total:	10,844							
			Check No. 22	184.82								
9	23		189.69	Kern County Water Agency Lost Hills Water Dist. - 1	5,468	4,842		295	331			
			191.18	Kern County Water Agency Lost Hills Water Dist. - 2	1,057	1,057						
			194.22	Kern County Water Agency Lost Hills Water Dist. - 3	53	53						
			196.40	Kern County Water Agency Berrenda Mesa - 2	0	800						
			196.75	Kern County Water Agency Lost Hills Water Dist. - 4	800	6,752	0	295	331	0		
			K.C.W.A. Reach 9 Subtotal:		7,378							
			Check No. 23	197.05								
10A	24		201.24	Kern County Water Agency Lost Hills Water Dist. - 7	524	524						
			202.05	Kern County Water Agency Lost Hills Water Dist. - 5	1,194	1,194						
			204.69	Kern County Water Agency Lost Hills Water Dist. - 6	0	8						
			205.26	Kern County Water Agency Lost Hills Water Dist. - 8	8	1,897		301	338			
			Check No. 24	207.94								
	25		209.71	Kern County Water Agency Belridge Water Storage Dist. - 1A	2,536	683						
			209.78	Kern National Wildlife Refuge USBR BV-1B	0	12,422		383	431			
				Kern County Water Agency Buena Vista WSD 1B	0							
			209.80	KCWA Semitropic WSD	683							
			KCWA Semitropic WSD Penstocks		13,236							
			USBR Total:		0	16,728	0	684	769	0		
			K.C.W.A. Reach 10A Subtotal:		18,181							

**Table 22b. Governor Edmund G. Brown California Aqueduct**

San Joaquin Field Division, Monthly Deliveries (Continued)

(In acre-feet)

**May 2004**

Reach No.	Operating Pool			Turnout	Total Diversions	Deliveries						
	Beginning and Ending					Table A Amount	USBR	Purchase Pool A	Purchase Pool B	Dry Year Purchase		
	No.	Structure	Mile									
11B	25	210.75	Kern County Water Agency Belridge - 2	0	300	300						
			Kern County Water Agency Belridge - 3	300								
			Kern County Water Agency Belridge - 4	0								
			Kern County Water Agency Belridge - 5	13,554		13,554						
			Kern County Water Agency Belridge - 5D	118								
		Check No. 25	217.79									
			K.C.W.A. Reach 11B Subtotal:	13,972		13,972	0	0	0	0		
12D	26	219.58	Kern County Water Agency Belridge - 6	0	136	58		78				
			Kern County Water Agency West Kern - 3	136								
	Check No. 26	224.92										
12E	27	230.37	Kern County Water Agency Buena Vista - 6	0	7,988			436	577			
			Check No. 27	231.73								
	28	235.75	Kern County Water Agency Buena Vista - 2	0								
			Kern County WA CVC	9,001								
			DRWD CVC	0								
			Tulare Co.	0								
			Lower Tule River	0								
			Fresno Co.	0								
			Pixley ID	0								
			Hacienda									
			DWR Wells	0								
	Check No. 28	238.11										
13B	29	1/ Arvin Edison Total:		0	7,988	0	0	0	0	0		
			Reach 12E Subtotal:	9,001		0	436	577	0			
		238.19	Kern Water Bank Inflow	0		479	141	158				
			Kern Water Bank Outflow	0								
			Kern River Intertie (inflow)	0								
			KCWA Buena Vista WSD - 7	0								
			KCWA Buena Vista WSD - 5	0								
			Kern County Water Agency Buena Vista - 3	778								
	Check No. 29	244.54	Buena Vista WSD	0								
	30	249.85	Kern County Water Agency Buena Vista - 4	0								
			Buena Vista Pumping Plant	201,385								
			K.C.W.A. Reach 13B Subtotal:	778	479	0	141	158	0			
14A	31	254.47	Kern County Water Agency West Kern - 2	0	114							
			Kern County Water Agency Wheeler Ridge-Maricopa - 2	114								

1/ Arvin Edison Contractors include Rag Gulch WD, Kern-Tulare WD, Fresno County, Hills Valley ID, Tri Valley WD, Tulare County, Lower Tule River ID, and Pixley ID.

**Table 22c. Governor Edmund G. Brown California Aqueduct**  
San Joaquin Field Division, Monthly Deliveries (Continued)

(In acre-feet)

**May 2004**

Reach No.	Operating Pool			Turnout	Total Diversions	Deliveries										
	Beginning and Ending					Table A Amount	USBR	Purchase Pool A	Purchase Pool B	Dry Year Purchase						
	No.	Structure	Mile													
14A	31	Check No. 31	256.14	Kern County Water Agency Wheeler Ridge-Maricopa - 3 Wheeler Ridge-Maricopa - 4	304 1,383	304	487	548	548	0						
	32		258.61													
			260.44													
	Check No. 32		261.72			766	0	487	548	0						
	KCWA Reach 14A Subtotal:				1,801											
14B	33		264.42	Kern County Water Agency Wheeler Ridge-Maricopa - 5 Wheeler Ridge-Maricopa - 6	3,134 905	3,134	905	2,376	2,376	0						
			266.91													
			Check No. 33	267.36												
	34		270.24	Kern County Water Agency Wheeler Ridge-Maricopa - 7	2,376	6,415	0	0	0	0						
			Check No. 34	271.27												
	Reach 14B Total:				6,415											
14C	35		272.39	Kern County Water Agency Wheeler Ridge-Maricopa - 8 Wheeler Ridge-Maricopa - 9 Arvin-Edison WSD	2,054 1,983 3,577	2,054	1,983	3,577	0	0						
			276.09													
			277.30													
			Reach 14C Total:		7,614											
	Teerink Pumping Plant		278.13		193,377	7,614	0	0	0	0						
15A	36		279.02	Kern County Water Agency Wheeler Ridge-Maricopa - 9A Wheeler Ridge-Maricopa - 10	752 5,941											
			280.06													
			Reach 15-A Total:		6,693											
	Chrisman Pumping Plant		280.36		180,384											
16A	37		282.06	Kern County Water Agency Wheeler Ridge-Maricopa - 11	0	26	26	95	496	496						
			Check No. 37	283.95												
			Reach 16A Total:		2,936											
	38		285.01	Kern County Water Agency Wheeler Ridge-Maricopa - 12	26											
			286.39													
			287.06													
	Check No. 38		287.09		0	1,230	223	866	2,936	0						
	39		287.62	Kern County Water Agency Wheeler Ridge-Maricopa - 13B												
			Check No. 39	290.21												
	40		291.26	Kern County Water Agency Wheeler Ridge-Maricopa - 14 Wheeler Ridge-Maricopa - 15 Tehachapi Cummings CWD	1,230 223 866	1,230	223	866	2,936	0						
			293.07													
			K.C.W.A. Reach 16A Subtotal:		2,936											
			Edmonston Pumping Plant	293.45	177,705											

**Table 23. Governor Edmund G. Brown California Aqueduct**

San Joaquin Field Division, Monthly Deliveries (Coastal Branch)

(In acre-feet)

May 2004

Reach No.	Operating Pool			Turnout	Total Diver-sions	Deliveries						
	Beginning and Ending					Table A Amount	USBR	Purchase Pool A	Purchase Pool B	Dry Year Purchase		
	No.	Structure	Mile									
31A	C-1	Coastal Branch Control	0.02		13,635	972	8,353	269	302			
		Las Perillas Pumping Plant	1.16		13,635							
	C-2		3.79	Green Valley Water District	0							
		Badger Hill Pumping Plant	4.27		13,635							
	C-3	Coastal Check No. 3	7.21									
	C-4		9.34	Castaic Lake WA (Devil's Den WD #1)	0							
		Coastal Check No. 4	9.34									
	C-5	Coastal Check No. 5	12.20									
	C-6		13.30	Kern County Water Agency Berrenda Mesa - 3	972							
			14.83	Kern County Water Agency Berrenda Mesa - 1	8,924							
		Devil's Den Pumping Plant	14.86	Kern County Water Agency Berrenda Mesa - PO	0							
					3,749							
				K.C.W.A. Reach 31A Subtotal:	9,896	9,325	0	269	302	0		
				K.C.W.A. Total:	84,801	79,726	0	2,390	2,685	0		
33A	C-7	Bluestone Pumping Plant	19.05		3,500	3,245	398	0	0			
	C-8	Polonio Pass Pumping Plant	26.54		3,710							
	C-9	Tank Site 1	27.81	(CCWA) Polonio Pass Treatment Plant								
	C-10	Shandon T.O.	38.23	Santa Barbara County (CCWA)	3,245							
		Tank Site 2	58.63	Central Coast:	0							
34	C-11	Chorro Valley T.O.	69.31	San Luis Obispo County (CCWA)	398	3,643	0	0	0			
		Energy Dissipater	78.12									
	C-12	Lopez T.O.	85.86	SLOCFC & WCD	0							
				CCWA Total:	3,643							
35		Guadalupe T.O.	102.70	SBCFC & WCD	0	0	0	0	0			
		Santa Maria T.O.	107.43	SBCFC & WCD	0							
		So. Cal. Water T.O.	109.20	SBCFC & WCD	0							
38				SBCFC & WCD Total:	0	0	0	0	0			
		Tank Site 5	115.42									

**Table 24. Southern Field Division Plant Data**

(in acre-feet)

May 2004

Date	West Branch					East Branch										
	Oso Pumping Plant	Warne Powerplant		Castaic Powerplant		Alamo Powerplant			Pearblossom Pumping Plant	Mojave Siphon Powerplant			Devil Canyon Powerplant Generation	Cherry Valley	Green Spot	Crafton Hills
		Generation	Bypass	Generation 1/	Pumpback 1/	Generation	Bypass Through Plant	Cottonwood Chute		Generation	Leakage	Bypass Flume				
1	1,812	1,924	0	2,682	2,841	3,402	0	347	3,538	3,673	0	0	3,122	0	0	0
2	1,759	1,469	0	3,170	4,062	3,300	0	273	3,248	3,346	0	0	3,088	0	0	0
3	1,013	1,155	0	3,578	2,899	2,948	0	154	2,894	3,267	0	0	3,060	8	30	27
4	640	460	0	2,731	1,676	2,892	0	120	2,659	2,736	0	0	2,964	9	28	28
5	851	786	0	3,058	1,668	3,155	0	114	2,904	2,941	0	0	3,183	0	30	29
6	853	694	0	2,959	2,613	2,851	0	225	2,794	2,779	0	0	2,973	10	29	29
7	857	522	0	2,348	593	3,252	0	239	3,126	3,273	0	0	3,003	11	29	29
8	0	153	0	116	1,265	3,345	0	105	3,273	3,385	0	0	3,199	0	0	0
9	0	0	0	32	1,868	3,091	0	198	3,018	3,071	0	0	2,933	0	0	0
10	107	0	0	4,194	660	833	0	1,825	2,485	2,725	0	0	3,048	0	28	25
11	2,668	2,382	0	4,692	813	0	0	3,864	2,790	2,596	0	0	3,171	10	31	30
12	2,772	2,829	0	4,306	1,568	0	0	2,969	3,087	3,157	0	0	3,149	8	28	28
13	2,401	2,552	0	4,156	3,125	0	0	3,591	3,177	3,439	0	0	3,155	0	16	16
14	2,252	2,387	0	3,602	1,546	0	0	3,928	3,345	3,213	0	0	3,166	9	0	0
15	2,717	2,301	0	3,182	1,569	0	0	3,767	3,303	3,644	0	0	3,187	0	0	0
16	3,564	2,629	0	2,658	2,148	0	0	4,306	3,620	3,737	0	0	3,323	0	0	0
17	1,949	2,256	0	3,962	1,522	0	0	3,768	3,242	3,136	0	0	3,323	0	21	20
18	2,636	3,113	0	5,288	1,536	0	0	3,033	2,892	3,165	0	0	3,207	10	20	20
19	3,028	2,786	0	5,979	1,897	1,185	0	2,504	3,191	2,929	0	0	3,249	0	18	18
20	2,796	3,146	0	4,673	1,125	3,484	0	310	3,351	3,592	0	0	3,340	11	14	13
21	3,060	3,090	0	7,756	1,637	3,268	0	210	3,217	3,252	0	0	3,157	10	0	0
22	3,037	3,254	0	846	955	3,488	0	275	3,323	3,387	0	0	3,417	0	0	0
23	3,031	3,065	0	707	2,720	3,605	0	189	3,342	3,282	0	0	3,321	0	0	0
24	2,993	3,043	0	5,336	1,058	3,456	0	319	3,378	3,488	0	0	3,136	10	26	21
25	2,995	2,883	0	4,293	1,877	3,210	0	181	3,092	3,149	0	0	3,143	9	26	26
26	2,995	2,549	94	6,577	1,112	3,260	0	175	3,137	3,053	0	0	3,186	0	26	26
27	2,995	2,820	0	7,111	2,453	3,235	0	233	3,090	3,354	0	0	3,201	7	28	26
28	2,995	3,098	0	7,798	3,664	3,446	0	249	3,162	3,186	0	0	3,203	0	0	0
29	3,116	2,730	0	7,315	1,058	3,333	0	196	3,247	3,180	0	0	3,328	0	0	0
30	2,989	2,903	0	3,455	5,400	3,594	0	45	3,088	3,213	0	0	3,257	0	0	0
31	3,264	3,107	0	4,479	4,731	3,347	0	0	3,087	3,117	0	0	3,366	0	0	0
Total	68,145	66,086	94	123,039	63,659	70,980	0	37,712	97,100	99,465	0	0	98,558	122	428	411

1/ Values supplied by LADWP, not verified by DWR.

**Table 25. Pyramid Lake**

Daily Operation

Capacity: 171,200 ac-ft

(in acre-feet except as noted)

**May 2004**

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow			Outflow			United Water Agency	Computed Losses (-) And Gains (+)	
				Project		Natural	Project		Natural			
				Castaic Powerplant Pumpback 1/	Warne Powerplant	Stream Flow	Castaic Powerplant Generation 1/	Recreation Deliveries	To Piru Creek			
Apr 30	2570.93	160,934										
1	2572.65	163,086	2,152	2,841	1,924	15	2,682	0	52	0	106	
2	2574.42	165,320	2,234	4,062	1,469	15	3,170	0	52	0	-90	
3	2574.74	165,726	406	2,899	1,155	15	3,578	1	52	0	-32	
4	2574.20	165,042	-684	1,676	460	14	2,731	0	52	0	-51	
5	2573.67	164,371	-671	1,668	786	14	3,058	1	52	0	-28	
6	2573.87	164,624	253	2,613	694	13	2,959	0	52	0	-56	
7	2572.80	163,275	-1,349	593	522	13	2,348	0	52	0	-77	
8	2573.75	164,472	1,197	1,265	153	13	116	0	52	0	-66	
9	2575.15	166,248	1,776	1,868	0	13	32	1	52	0	-20	
10	2572.29	162,634	-3,614	660	0	13	4,194	0	52	0	-41	
11	2570.96	160,971	-1,663	813	2,382	13	4,692	0	52	0	-127	
12	2570.90	160,897	-74	1,568	2,829	13	4,306	0	52	0	-126	
13	2572.01	162,283	1,386	3,125	2,552	13	4,156	0	52	0	-96	
14	2572.18	162,496	213	1,546	2,387	12	3,602	1	52	0	-77	
15	2572.72	163,174	678	1,569	2,301	12	3,182	0	52	0	30	
16	2574.28	165,143	1,969	2,148	2,629	12	2,658	0	52	0	-110	
17	2574.03	164,826	-317	1,522	2,256	13	3,962	0	52	0	-94	
18	2573.42	164,056	-770	1,536	3,113	13	5,288	1	52	0	-91	
19	2572.34	162,697	-1,359	1,897	2,786	13	5,979	0	52	0	-24	
20	2571.92	162,170	-527	1,125	3,146	13	4,673	0	52	0	-86	
21	2569.36	158,986	-3,184	1,637	3,090	13	7,756	0	52	0	-116	
22	2572.02	162,296	3,310	955	3,254	12	846	1	52	0	-12	
23	2575.93	167,242	4,946	2,720	3,065	12	707	0	52	0	-92	
24	2574.84	165,853	-1,389	1,058	3,043	12	5,336	0	52	0	-114	
25	2575.15	166,248	395	1,877	2,883	12	4,293	0	52	0	-32	
26	2572.86	163,343	-2,905	1,112	2,643	11	6,577	1	53	0	-40	
27	2571.23	161,308	-2,035	2,453	2,820	11	7,111	0	53	0	-155	
28	2570.33	160,188	-1,120	3,664	3,098	10	7,798	0	53	0	-41	
29	2567.33	156,489	-3,699	1,058	2,730	10	7,315	0	53	0	-129	
30	2571.22	161,296	4,807	5,400	2,903	9	3,455	0	53	0	3	
31	2573.78	164,510	3,214	4,731	3,107	8	4,479	0	53	0	-100	
<b>Total</b>				<b>3,576</b>	<b>63,659</b>	<b>66,180</b>	<b>385</b>	<b>123,039</b>	<b>7</b>	<b>1,618</b>	<b>0</b>	<b>-1,984</b>

1/ Values supplied by LADWP, not verified by DWR.

**Table 26. Elderberry Forebay**

Daily Operation

(in acre-feet except as noted)

Capacity: 32,476 ac-ft

**May 2004**

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow		Outflow			Computed Losses (-) And Gains (+)	
				Castaic Powerplant Generation 1/	Natural	Castaic Powerplant Pumpback 1/	To Castaic Lake			
				Natural	Project 1/					
Apr 30	1514.96	21,144								
1	1514.59	20,994	-150	2,682	0	2,841	0	0	9	
2	1512.43	20,131	-863	3,170	0	4,062	0	0	29	
3	1514.12	20,805	674	3,578	0	2,899	0	0	-5	
4	1513.56	20,580	-225	2,731	0	1,676	0	1,279	-1	
5	1510.71	19,458	-1,122	3,058	0	1,668	0	2,511	-1	
6	1511.60	19,805	347	2,959	0	2,613	0	0	1	
7	1508.70	18,687	-1,118	2,348	0	593	0	2,871	-2	
8	1503.71	16,841	-1,846	116	0	1,265	0	699	2	
9	1498.50	15,010	-1,831	32	0	1,868	0	0	5	
10	1508.35	18,555	3,545	4,194	0	660	0	0	11	
11	1512.55	20,179	1,624	4,692	0	813	0	2,255	0	
12	1513.00	20,357	178	4,306	0	1,568	0	2,559	-1	
13	1515.80	21,486	1,129	4,156	0	3,125	0	0	98	
14	1512.00	19,962	-1,524	3,602	0	1,546	0	3,581	1	
15	1509.10	18,840	-1,122	3,182	0	1,569	0	2,733	-2	
16	1510.30	19,300	460	2,658	0	2,148	0	0	-50	
17	1516.20	21,650	2,350	3,962	0	1,522	0	0	-90	
18	1515.90	21,527	-123	5,288	0	1,536	0	3,876	1	
19	1515.95	21,548	21	5,979	0	1,897	0	4,061	0	
20	1514.60	20,998	-550	4,673	0	1,125	0	4,096	-2	
21	1519.10	22,859	1,861	7,756	0	1,637	0	4,259	1	
22	1509.30	18,916	-3,943	846	0	955	0	3,833	-1	
23	1504.20	17,019	-1,897	707	0	2,720	0	0	116	
24	1514.95	21,140	4,121	5,336	0	1,058	0	0	-157	
25	1510.70	19,455	-1,685	4,293	0	1,877	0	4,039	-62	
26	1514.40	20,917	1,462	6,577	0	1,112	0	3,964	-39	
27	1515.80	21,486	569	7,111	0	2,453	0	4,089	0	
28	1516.30	21,691	205	7,798	0	3,664	0	3,929	0	
29	1521.50	23,884	2,193	7,315	0	1,058	0	4,063	-1	
30	1517.10	22,021	-1,863	3,455	0	5,400	0	0	82	
31	1516.40	21,732	-289	4,479	0	4,731	0	0	-37	
Total			588	123,039	0	63,659	0	58,697	-95	

1/ Values supplied by LADWP, not verified by DWR.

**Table 27. Castaic Lake**

Daily Operation

(in acre-feet except as noted)

Capacity: 323,699 ac-ft

**May 2004**

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow		Outflow		Computed Losses (-) And Gains (+)	
				From Elderberry Forebay /1		Natural	Deliveries		
				Natural	Project				
Apr 30	1508.69	309,775							
1	1507.51	307,211	-2,564	0	0	0	2,501	0	
2	1506.46	304,940	-2,271	0	0	0	2,325	0	
3	1505.44	302,744	-2,196	1	0	0	2,140	0	
4	1504.90	301,585	-1,159	0	1,279	0	2,368	0	
5	1504.90	301,585	0	1	2,511	0	2,476	0	
6	1503.79	299,210	-2,375	0	0	0	2,347	0	
7	1503.94	299,530	320	0	2,871	0	2,607	0	
8	1502.98	297,485	-2,045	0	699	0	2,752	0	
9	1501.68	294,727	-2,758	1	0	0	2,673	0	
10	1500.31	291,838	-2,889	0	0	0	2,800	0	
11	1499.98	291,144	-694	0	2,255	0	2,847	0	
12	1499.83	290,829	-315	1	2,559	0	2,793	0	
13	1498.45	287,942	-2,887	0	0	0	2,848	0	
14	1498.84	288,756	814	0	3,581	0	2,843	0	
15	1498.78	288,631	-125	0	2,733	0	2,856	0	
16	1497.40	285,756	-2,875	0	0	0	2,860	0	
17	1496.04	282,939	-2,817	0	0	0	2,803	0	
18	1496.52	283,932	993	0	3,876	0	2,836	0	
19	1497.03	284,988	1,056	0	4,061	0	2,854	0	
20	1497.66	286,296	1,308	0	4,096	0	2,817	0	
21	1498.24	287,504	1,208	0	4,259	0	2,847	99	
22	1498.74	288,547	1,043	0	3,833	0	2,863	99	
23	1497.30	285,548	-2,999	0	0	0	2,874	99	
24	1495.89	282,630	-2,918	0	0	0	2,879	99	
25	1496.40	283,683	1,053	0	4,039	0	2,874	102	
26	1496.91	284,739	1,056	0	3,964	0	2,858	0	
27	1497.42	285,797	1,058	0	4,089	0	2,885	0	
28	1497.91	286,816	1,019	0	3,929	0	2,891	0	
29	1498.43	287,900	1,084	0	4,063	0	2,884	0	
30	1497.02	284,967	-2,933	0	0	0	2,892	0	
31	1495.67	282,176	-2,791	0	0	0	2,882	0	
Total		-27,599	4	58,697	0	84,975	498	-827	

1/ Values supplied by LADWP, not verified by DWR.

**Table 28. Governor Edmund G. Brown California Aqueduct**  
 Southern Field Division, Monthly Deliveries (West Branch)

(In acre-feet)

**May 2004**

Reach No.	Operating Pool			Turnout	Total Diversions	Deliveries						
	Beginning and Ending					Table A Amount	Rec.	Local	Transfer 2/	Flexible Payback		
	No.	Structure	Mile									
29A	42	Oso Pumping Plant	1.49		63,339							
29F	W2	Quail Lake	5.02	Antelope Valley-East Kern Water Agency	Re-moved		7	41	0			
		Quail Lake Embankment	7.82	Antelope Valley-East Kern Water Agency	Stub							
		Warne Power Plant	14.07		63,773							
29H	W3	Pyramid Lake		Calif. State Park Pyramid Recreation	7		7	41	0			
			14.10	United Water Conservation Dist.	0							
		Pyramid Dam	17.10	Piru Creek Fish Enhancement	0							
		Castaic Power Plant	25.82	( 28,409 AF pumpback ) 2/	89,666							
29J	W4	Elderberry Forebay					18,168	61,894	2,479			
		Forebay Dam	28.12									
30 1/	W5	Castaic Lake		Calif. State Park Castaic Lake Recreation	41		18,168	61,894	2,479			
		Castaic Dam	31.47									
		Castaic Lake Outlet	31.55	MWD - 78"	18,168							
				MWD - 132"	61,894							
				Castaic Lake WA - T1	2,479							
				Castaic Lake WA	2,239							
				United Water Conservation Dist.	0							
				MWD - Ventura County FCD	154							
				LA Co. Parks & Recreation	0							
				Releases to Lagoon	498							
				Reach 30 Subtotal:	84,975		84,934	41	0	0		
	W6	Castaic Lagoon		Recreation to Lagoon	484							
		Castaic Lagoon Outlet	31.87		184							

1/ Reach 30 actually terminates at mile 31.50. It is shown here as including the outlet works at mile 31.55.

All deliveries from the outlet works and from the Lagoon are billed to Reach 30.

2/ San Bernardino Table A transferred to MWD.

**Table 29. Silverwood Lake**

## Daily Operation

(in acre-feet except as noted)

Capacity: 74,970 ac-ft

**May 2004**

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow			Outflow					Computed Losses (-) And Gains (+)	Las Flores Ranch Exchange 1/	
							Project			Del. To Mojave W.A.	Natural To Mojave River			
				Mojave Siphon Power-plant	Mojave Bypass Flume	Natural Stream Flow	Delivered to CLAWA	Rec.	San Bernardino Tunnel					
Apr 30	3351.88	71,958												
1	3352.38	72,436	478	3,673	0	3	9	0	3,122	0	0	-67	0	
2	3352.69	72,734	298	3,346	0	2	8	0	3,088	0	0	46	0	
3	3352.95	72,983	249	3,267	0	2	9	0	3,060	0	0	49	0	
4	3352.61	72,657	-326	2,736	0	2	9	1	2,964	0	0	-90	0	
5	3352.47	72,523	-134	2,941	0	2	6	0	3,183	0	1	113	0	
6	3352.21	72,274	-249	2,779	0	2	9	0	2,973	0	0	-48	0	
7	3352.47	72,523	249	3,273	0	2	9	1	3,003	0	0	-13	0	
8	3352.61	72,657	134	3,385	0	2	9	0	3,199	0	1	-44	0	
9	3352.95	72,983	326	3,071	0	2	9	0	2,933	0	0	195	0	
10	3352.55	72,599	-384	2,725	0	2	9	0	3,048	0	0	-54	0	
11	3351.93	72,006	-593	2,596	0	2	8	1	3,171	0	1	-10	0	
12	3351.90	71,977	-29	3,157	0	2	9	0	3,149	0	0	-30	0	
13	3351.99	72,063	86	3,439	0	2	8	0	3,155	0	1	-191	0	
14	3352.16	72,226	163	3,213	0	2	8	0	3,166	0	0	122	0	
15	3352.61	72,657	431	3,644	0	2	8	1	3,187	0	1	-18	0	
16	3353.06	73,089	432	3,737	0	2	7	0	3,323	0	0	23	0	
17	3353.06	73,089	0	3,136	0	2	8	0	3,323	0	1	194	0	
18	3353.00	73,032	-57	3,165	0	2	7	1	3,207	0	0	-9	0	
19	3352.83	72,868	-164	2,929	0	2	7	0	3,249	0	1	162	0	
20	3353.09	73,118	250	3,592	0	2	6	0	3,340	0	0	2	0	
21	3353.17	73,195	77	3,252	0	2	7	1	3,157	0	1	-11	3	
22	3353.06	73,089	-106	3,387	0	2	8	0	3,417	0	0	-70	5	
23	3353.09	73,118	29	3,282	0	2	8	0	3,321	0	0	74	5	
24	3353.39	73,407	289	3,488	0	2	8	1	3,136	0	1	-55	6	
25	3353.39	73,407	0	3,149	0	2	8	0	3,143	0	0	0	6	
26	3353.20	73,224	-183	3,053	0	1	8	0	3,186	0	0	-43	6	
27	3352.45	72,503	-721	3,354	0	1	8	0	3,201	0	1	-866	6	
28	3353.39	73,407	904	3,186	0	1	7	0	3,203	0	0	927	6	
29	3353.23	73,253	-154	3,180	0	1	7	0	3,328	0	0	0	6	
30	3353.17	73,195	-58	3,213	0	1	7	0	3,257	0	1	-7	6	
31	3352.95	72,983	-212	3,117	0	1	7	0	3,366	0	0	43	6	
Total				1,025	99,465	0	57	245	7	98,558	0	11	324	61

1/ Project water delivered from Mojave Siphon in exchange for like amount of Natural Streamflow.

**Table 30. Lake Perris**

## Daily Operation

(in acre-feet except as noted)

Capacity: 131,452 ac-ft

**May 2004**

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow 1/	Outflow 2/	Computed Losses (-) Gains (+) 1/
Apr 30	1585.52	121,204				
1	1585.54	121,249	45		9	
2	1585.49	121,137	-112		9	
3	1585.46	121,069	-68		9	
4	1585.52	121,204	135		10	
5	1585.50	121,159	-45		7	
6	1585.45	121,047	-112		10	
7	1585.42	120,979	-68		9	
8	1585.45	121,047	68		9	
9	1585.44	121,024	-23		9	
10	1585.41	120,957	-67		9	
11	1585.46	121,069	112		9	
12	1585.47	121,092	23		9	
13	1585.35	120,822	-270		9	
14	1585.32	120,754	-68		9	
15	1585.37	120,867	113		9	
16	1585.32	120,754	-113		9	
17	1585.32	120,754	0		9	
18	1585.31	120,732	-22		9	
19	1585.35	120,822	90		9	
20	1585.35	120,822	0		93	
21	1585.30	120,709	-113		9	
22	1585.29	120,687	-22		9	
23	1585.26	120,619	-68		9	
24	1585.26	120,619	0		9	
25	1585.29	120,687	68		8	
26	1585.27	120,642	-45		9	
27	1585.26	120,619	-23		9	
28	1585.22	120,529	-90		8	
29	1585.22	120,529	0		8	
30	1585.25	120,597	68		9	
31	1585.25	120,597	0		9	
<b>Total</b>		-607	1,535	360	-1,782	

1/ Readings are not taken on a daily basis. End of month only.

2/ Includes deliveries to MWD from Reach 28J and recreation water to California State Park at lake Perris.

**Table 31a. Governor Edmund G. Brown California Aqueduct**

Southern Field Division, Monthly Deliveries (East Branch)

(In acre-feet)

**May 2004**

Reach No.	Operating Pool			Turnout	Total Diver-sions	Deliveries						
	Beginning and Ending					Table A Amount	Rec.	Transfer	Purchase Pool A	Transfer Local Out		
	No.	Structure	Mile									
17E	40	Edmonston Pumping Plant	293.45		177,705							
	41		298.65	Kern County Water Agency Tej.-Cas	Stub							
17F		Check No. 41	303.41									
18A	42	Check No. 42	304.99									
19	43	Alamo Powerplant	305.73	(Does not include 37,712 AF flow down Cottonwood Chute)	70,980							
			308.05	Antelope Valley-East Kern WA	0							
		Check No. 43	309.70									
	44		311.84	LADWP Connection	0							
			313.50	AVEK 245th Street West	0							
		Check No. 44	314.81									
	45		314.93	AVEK 235th Street West	0							
			315.57	AVEK 225th Street West	0							
		Check No. 45	319.74									
	46		323.19	Antelope Valley-East Kern WA								
				Fairmont	1,459							
				Mojave Water Agency								
		Check No. 46	323.84	Fairmont	158							
				Reach 19 Total:	1,617							
20A	47	Check No. 47	326.77									
	48		326.91	Antelope Valley-East Kern WA								
				Willow Springs Siphon	45							
			329.65	Antelope Valley-East Kern WA	Re- moved							
	Check No. 48		330.82									
	49	Check No. 49	335.93									
	50		336.73	AVEK WA - Quartz Hill								
				(Wheeled for Palmdale WD)	0							
				Antelope Valley-East Kern WA	4,071							
			339.68	Antelope Valley-East Kern WA	94							
20B	Check No. 50		341.51									
	51	Check No. 51	342.07									
	52		342.80	Antelope Valley-East Kern WA	Not in Use							
		Check No. 52	343.74									
	53		346.98	PWD								
				Palmdale	1,286							
			348.14	Antelope Valley-East Kern WA								
21	Check No. 53		348.17	Acton Treatment Plant	148							
	54	Check No. 54	350.25									
	55	Check No. 55	352.70									
	56	Check No. 56	354.76									
22A			354.97	Littlerock Creek I.D.	0							
	57	Check No. 57	356.93									
	58		357.60	Antelope Valley-East Kern WA	130							
			357.72	Antelope Valley-East Kern WA	12							
			359.82	96th Street East								
				Antelope Valley-East Kern WA	532							
East Side Treatment Plant												

**Table 31b. Governor Edmund G. Brown California Aqueduct**

Southern Field Division, Monthly Deliveries (East Branch, Continued)

(In acre-feet)

**May 2004**

Reach No.	Operating Pool			Turnout	Total Diversions	Deliveries						
	Beginning and Ending					Table A Amount	Recreation	Transfer	Purchase Pool A	Transfer Local Out		
	No.	Structure	Mile									
22B	58	Pearblossom Pumping Plant	360.61		97,100	132	405	61	7	13,192		
	59	Check No. 59	366.09									
	60		366.50		Antelope Valley-East Kern WA							
	Check No. 60		373.94									
	61	Check No. 61	379.00									
	62	Check No. 62	384.26									
	63	Check No. 63	389.20		Mojave Water Agency	132	405	61	7	13,192		
			394.60		Mojave River							
					Mojave Water Agency	0	0	0	0	0		
	64	Check No. 64	395.10									
	65	Check No. 65	400.32									
	66		401.10		Mojave Water Agency	405	0	0	0	0		
					Morongo 24" and 42"							
					Mojave Water Agency							
23	Check No. 66		403.41		Hesperia							
	Mojave Siphon		405.48		Las Flores Ranch							
24		Mojave Siphon Powerplant	405.65									
25	Silverwood Lake	407.65		Crestline Lake Arrowhead Water Agency		245	7	0	0	0		
26A	San Bernardino Tunnel Intake	407.70		Calif. State Park		98,558	0	0	0	0		
					Silverwood Agency (Rec.)							
28G	Devil Canyon Afterbay Control Structures	412.88		MWD-SC Rialto		98,558	0	0	0	0		
					Desert Water Agency (MWD Wheeling Exchange)							
					San Gabriel Valley Water District	1,599	0	0	0	0		
					Coachella Valley WD (MWD Wheeling Exchange)							
					San Bernardino Valley MWD 24" and 72"	120	0	0	0	0		
					San Bernardino Valley MWD 48"							
					MWD (SBVMWD Exchange)	48,273	0	0	0	0		
					San Gorgonio Pass Water Agency							
28H	Santa Ana Valley Pipeline	425.46		123		0	0	0	0	0		
					MWD-SC Box Springs	10,463	0	0	0	0		
28J	Lake Perris	433.06		22,958	MWD-SC Perris Bypass Pipeline	22,958	0	0	0	0		
					MWD-SC 18"							
		440.05		279	MWD-SC 54"	28	0	0	0	0		
					MWD-SC 78"							
		442.00		53	Calif. State Park	53	0	0	0	0		
					Lake Perris Recreation							
				MWD Total:	177,941	177,941	0	0	0	0		

**Table 32. Water Quality At Selected SWP Locations**

May 2004

Constituent	Units	Thermalito Afterbay At Outlet	North Bay Aqueduct Barker Slough Pumping Plant	Banks Pumping Plant	Delta Mendota Canal At McCabe Rd.	California Aqueduct				Devil Canyon Afterbay Near San Bernardino
						O'Neill Forebay Outlet (Check 13)	Kettleman City (Check 21)	Near Hwy 119 (Check 29)	Tehachapi Afterbay (Check 41)	
Alkalinity	mg/l as CaCO <sub>3</sub>	38	113	72	84	81	81	80	82	80
Antimony	mg/l	NR	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	NR	NR
Arsenic	mg/l	<0.001	0.003	0.002	0.002	0.002	0.002	0.002	0.002	0.002
Beryllium	mg/l	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Boron	mg/l	<0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Bromide	mg/l	<0.01	0.05	0.13	0.17	0.22	0.22	0.21	0.20	0.19
Calcium	mg/l	7	18	19	24	21	21	22	21	21
Carbon - Dissolved Organic	mg/l as C	NR	3	3	4	3	3	3	3	3
Carbon - Total Organic	mg/l as C	NR	4	4	4	3	3	3	3	4
Chloride	mg/l	<1	22	49	62	73	72	72	73	64
Chromium	mg/l	<0.001	0.001	0.001	0.002	0.002	0.002	0.002	0.002	0.002
Copper	mg/l	<0.001	0.003	0.002	0.002	0.002	0.002	0.002	0.002	0.002
Fluoride	mg/l	<0.1	0.1	<0.1	0.1	<0.1	<0.1	<0.1	<0.1	0.1
Hardness	mg/l as CaCO <sub>3</sub>	30	107	86	113	106	106	99	106	99
Iron	mg/l	0.009	0.009	<0.005	0.005	0.008	<0.005	<0.005	<0.005	<0.005
Lead	mg/l	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Magnesium	mg/l	3	15	11	13	13	13	13	13	12
Manganese	mg/l	<0.005	0.017	<0.005	<0.005	0.008	<0.005	<0.005	<0.005	<0.005
Nitrate + Nitrite	mg/l as N	<0.01	0.15	0.48	NR	NR	0.69	NR	0.66	0.67
Phosphorus-Ortho	mg/l as P	<0.01	0.10	0.08	NR	NR	0.09	NR	0.08	0.08
Phosphorus-Total	mg/l	0.02	0.23	0.13	NR	NR	0.12	NR	0.10	0.12
Selenium	mg/l	<0.001	<0.001	<0.001	0.001	0.001	0.001	0.001	0.001	0.001
Sodium	mg/l	3	26	37	47	48	49	51	49	45
Specific Conductance	µS/cm	77	334	385	457	474	475	474	466	436
Sulfate	mg/l	2	26	43	54	42	42	41	42	42
Total Dissolved Solids	mg/l	53	198	247	272	273	280	275	259	238
Turbidity	NTU	5	49	19	10	2	6	8	6	<1
Zinc	mg/l	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005

mg/l milligrams per liter

µg/l micrograms per liter

µS/cm microSiemens per centimeter

NR - Not Reported

NTU - nephelometric turbidity units

**Table 33. Water Quality At Selected Delta Stations**

**May 2004**

Date	Tides (feet above mean sea level)		Flow In CFS		Rio Vista	Electrical Conductivity in milliSiemens/cm								Cl in mg/l	
	(Antioch) Daily Mean		Net Delta Outflow Index			Antioch	Chipps Island	Emmaton		Jersey Point		Clifton Court	Cache Slough	Delta Mendota Canal	
	Mean Daily	Monthly Average	md	md		md	14dm	md	14dm	md	md	md	md	md	
	Hi	Half												md	
1	2.33	0.69	12,438	12,438	9,015	0.27	2.21	0.17	0.15	0.17	0.15	0.36	0.55	0.54	19
2	2.42	0.59	12,443	12,441	9,003	0.32	1.98	0.18	0.15	0.17	0.16	0.37	0.67	0.59	21
3	2.67	0.74	12,351	12,411	8,969	0.37	2.28	0.19	0.16	0.18	0.16	0.40	0.84	0.58	21
4	3.14	1.06	12,401	12,408	8,901	0.49	2.99	0.21	0.16	0.18	0.16	0.40	0.84	0.48	21
5	3.55	1.27	12,541	12,435	8,700	0.54	3.63	0.26	0.18	0.19	0.16	0.34	0.78	0.40	21
6	3.74	1.39	13,268	12,574	9,201	0.66	3.42	0.26	0.19	0.20	0.17	0.36	0.64	0.42	21
7	3.80	1.35	14,033	12,782	9,940	0.63	3.32	0.27	0.20	0.20	0.17	0.36	0.60	0.42	22
8	3.63	1.31	14,220	12,962	10,245	0.61	3.16	0.28	0.21	0.21	0.17	0.40	0.57	0.42	24
9	3.40	1.33	13,885	13,065	10,058	0.58	2.87	0.28	0.22	0.21	0.18	0.36	0.54	0.40	25
10	3.23	1.34	13,660	13,124	9,842	0.57	2.92	0.28	0.23	0.22	0.18	0.39	0.60	0.38	25
11	2.45	0.95	14,437	13,243	10,578	0.43	1.84	0.22	0.23	0.21	0.19	0.41	0.61	0.38	26
12	2.11	0.76	14,881	13,380	11,046	0.37	1.47	0.20	0.22	0.21	0.19	0.48	0.59	0.43	30
13	2.35	0.78	14,630	13,476	10,971	0.36	1.39	0.20	0.23	0.22	0.20	0.40	0.59	0.49	29
14	2.53	0.83	14,196	13,527	10,797	0.38	1.41	0.19	0.23	0.22	0.20	0.41	0.51	0.00	30
15	2.78	0.96	13,508	13,526	10,008	0.37	1.69	0.20	0.23	0.22	0.20	0.42	0.46	0.00	30
16	2.88	1.07	12,022	13,432	9,259	0.41	1.89	0.20	0.23	0.22	0.21	0.44	0.46	0.00	30
17	3.26	1.29	11,486	13,318	8,834	0.45	2.39	0.21	0.23	0.22	0.21	0.43	0.46	0.00	29
18	3.21	1.15	11,280	13,204	8,627	0.45	2.09	0.20	0.23	0.21	0.21	0.41	0.48	0.00	30
19	3.13	1.17	12,149	13,149	9,465	0.44	1.90	0.21	0.23	0.22	0.21	0.39	0.49	0.00	32
20	3.29	1.30	11,814	13,082	9,345	0.45	2.20	0.22	0.23	0.22	0.22	0.42	0.45	0.37	29
21	3.34	1.38	11,412	13,003	9,255	0.48	2.38	0.23	0.22	0.22	0.22	0.39	0.48	0.40	30
22	3.30	1.45	10,840	12,904	9,008	0.48	2.36	0.23	0.22	0.22	0.22	0.40	0.46	0.40	31
23	3.24	1.40	10,350	12,793	8,842	0.49	2.10	0.23	0.22	0.22	0.22	0.41	0.52	0.44	33
24	2.93	1.32	10,620	12,703	9,169	0.45	1.88	0.21	0.21	0.22	0.22	0.42	0.58	0.48	32
25	2.71	1.36	10,511	12,615	9,181	0.45	1.87	0.22	0.21	0.22	0.22	0.41	0.57	0.50	33
26	2.47	1.33	10,432	12,531	9,216	0.44	1.78	0.22	0.21	0.23	0.22	0.42	0.54	0.52	37
27	2.34	1.13	10,305	12,449	9,137	0.41	1.66	0.21	0.21	0.23	0.22	0.44	0.53	0.56	35
28	2.47	0.90	9,419	12,340	8,838	0.40	1.52	0.21	0.21	0.23	0.22	0.50	0.60	0.58	36
29	2.47	0.68	9,570	12,245	9,271	0.37	1.46	0.20	0.21	0.23	0.22	0.46	0.69	0.56	36
30	2.50	0.61	9,405	12,150	9,786	0.36	1.52	0.20	0.21	0.23	0.22	0.45	0.69	0.53	37
31															

Clifton Court Cl(mg/l)=200X EC - 25

e = Estimated

N.R. = No Record.

N.C. = Not computed due to insufficient data.

f = Excess Delta conditions with fish concerns.

r = Excess delta conditions with export/inflow ratio concerns.

s = Balanced water conditions with storage withdrawals.

dm = Daily Mean

md = Mean Daily

**Table 34. Pesticides, Herbicides, and Other Organic Substances Detected In the SWP**

**May 2004**

Sampling Location	Sample Date 1/	Chemical Detected	Concentration µg/l 2/
North Bay Aqueduct At Barker Slough Pumping Plant		No Sample	
California Aqueduct At Banks Pumping Plant	March 17, 2004	None Detected	
O'Niell Forebay Outlet Check 13	March 17, 2004	None Detected	
Delta Mendota Canal At McCabe Road	March 17, 2004	None Detected	
California Aqueduct Near Kettleman City (Check 21)	March 17, 2004	None Detected	
California Aqueduct At Tehachapi Afterbay (Check 41)	March 17, 2004	None Detected	
Devil Canyon Head Works	March 17, 2004	None Detected	

1/ Locations are normally sampled during March, June, and September. Monthly reports will include data for the month in which samples were most recently taken.

2/ Micrograms per liter.

**Table 35. Oroville and Delta Field Divisions Energy Data**

(in kWh)

**May 2004**

Date	Oroville Thermalito Complex		Barker Slough Pumping Plant	Cordelia Pumping Plant Load	Banks Pumping Plant		South Bay Pumping Plant Load	Del Valle Pumping Plant Load
	Generation	Load			Total Load	SWP Load		
1	4,350,240	0	31,255	41,447	506,688	506,688	526,440	12,027
2	2,577,312	0	28,889	38,633	839,040	839,040	534,235	13,415
3	6,822,432	0	31,948	42,154	840,768	840,768	432,515	5,748
4	7,394,688	0	36,218	38,010	19,584	19,584	371,075	344
5	7,066,656	864	44,254	40,579	425,088	425,088	371,565	330
6	6,675,264	2,592	39,662	36,925	428,928	428,928	378,470	322
7	9,330,336	4,320	36,092	36,421	452,160	452,160	385,745	324
8	3,463,200	4,608	42,560	40,691	293,184	293,184	392,425	319
9	1,886,112	6,336	39,256	37,464	531,648	531,648	356,355	317
10	6,287,904	3,744	42,609	39,662	846,144	846,144	278,370	331
11	8,586,144	3,456	43,827	42,350	844,608	844,608	221,910	312
12	8,064,288	4,320	42,525	40,586	20,352	20,352	185,625	351
13	8,165,376	2,592	45,486	42,826	222,912	222,912	208,590	353
14	8,679,744	3,168	48,706	44,023	425,472	425,472	295,355	269
15	1,233,792	5,760	50,246	44,772	423,360	423,360	302,055	309
16	2,941,056	5,472	51,296	44,793	452,160	452,160	292,515	314
17	7,229,952	4,032	51,233	43,883	18,432	18,432	299,780	105
18	4,121,568	288	55,531	47,663	272,832	272,832	303,495	152
19	9,546,624	4,320	44,674	39,382	466,176	466,176	305,100	304
20	7,633,440	4,032	37,534	34,034	665,280	665,280	307,010	303
21	6,266,016	4,032	37,737	34,202	292,800	292,800	301,415	299
22	737,280	10,368	38,808	34,454	293,376	293,376	303,455	299
23	2,913,408	6,912	41,951	34,125	293,568	293,568	296,355	296
24	7,585,344	288	40,642	33,761	293,184	293,184	303,765	299
25	6,429,024	2,016	43,414	33,306	276,288	276,288	306,060	318
26	4,451,904	4,896	39,326	32,907	290,688	290,688	318,465	324
27	5,062,752	3,456	11,977	16,303	527,424	527,424	304,510	329
28	6,353,568	3,168	27,335	17,003	650,112	650,112	315,370	324
29	2,265,696	2,880	40,537	33,117	388,032	388,032	291,345	323
30	4,512,384	5,184	41,846	32,515	387,648	387,648	301,320	331
31	4,000,032	5,472	40,964	33,187	388,992	388,992	301,330	337
<b>Total</b>	<b>172,633,536</b>	<b>108,576</b>	<b>1,248,338</b>	<b>1,151,178</b>	<b>13,076,928</b>	<b>13,076,928</b>	<b>10,092,020</b>	<b>39,728</b>

**Table 36. San Luis Field Division Energy Data**

**May 2004**

(in kWh)

Date	Dos Amigos Pumping Plant		Gianelli Pumping-Generating Plant			
	Total Load	SWP Load 1/	Total Generation	SWP Generation 1/	Total Load	SWP Load 1/
1	1,962,000	1,392,000	4,645,728	2,528,728	0	0
2	1,955,952	1,379,952	3,425,760	1,241,760	0	0
3	1,409,760	839,760	4,256,064	2,321,064	1,728	1,728
4	1,638,576	1,020,576	3,717,504	1,962,504	6,336	6,336
5	1,828,944	1,099,944	4,245,984	1,437,984	0	0
6	1,731,456	1,002,456	4,270,752	2,071,752	0	0
7	1,839,600	1,110,600	5,598,144	2,206,144	0	0
8	1,559,808	830,808	4,533,984	2,187,984	5,760	5,760
9	1,522,944	802,944	1,631,520	251,520	11,520	11,520
10	1,206,288	477,288	4,688,640	595,640	1,728	1,728
11	1,857,744	1,128,744	3,349,728	1,279,728	7,488	7,488
12	1,722,960	993,960	3,953,088	1,883,088	5,760	5,760
13	1,837,584	1,108,584	4,777,056	2,302,056	0	0
14	2,038,032	1,309,032	4,171,968	1,582,968	0	0
15	1,970,784	1,241,784	4,560,192	2,123,192	0	0
16	2,174,976	1,454,976	3,994,848	2,089,848	5,472	5,472
17	1,528,848	799,848	4,145,760	2,240,760	1,728	1,728
18	1,812,960	1,290,960	3,853,440	1,948,440	5,760	5,760
19	2,152,080	1,630,080	4,038,624	2,133,624	1,728	1,728
20	2,384,496	1,862,496	3,932,352	2,087,352	5,760	5,760
21	2,068,848	1,546,848	4,807,296	3,142,296	0	0
22	2,264,112	1,742,112	4,622,112	2,822,112	0	0
23	1,989,648	1,173,648	3,345,696	2,025,696	0	0
24	2,065,968	1,240,968	4,206,240	2,406,240	0	0
25	2,124,720	1,299,720	3,745,152	1,873,152	2,880	2,880
26	2,479,392	1,654,392	4,439,520	1,991,520	0	0
27	2,387,376	1,562,376	4,764,672	2,582,672	0	0
28	2,681,568	1,856,568	5,091,840	3,022,840	0	0
29	2,573,856	1,748,856	4,525,920	2,281,920	0	0
30	2,440,080	1,624,080	3,499,776	2,212,776	0	0
31	2,314,800	1,498,800	3,475,584	1,990,584	0	0
Total	61,526,160	39,725,160	128,314,944	62,827,944	63,648	63,648

1/ Negative values may appear in SWP columns and indicate a mismatch of scheduled CVP energy and actual pumping; adjustments to SWP water shares are made to balance the mismatch.

**Table 37. San Joaquin Field Division Pumping Plant Energy Load Data**

(in kWh)

**May 2004**

Date	Coastal Branch					California Aqueduct			
	Las Perillas	Badger Hill	Devils Den	Bluestone	Polonio	Buena Vista	Teerink	Chrisman	Edmonston
1	45,578	118,144	68,695	67,205	70,220	1,602,504	1,632,816	3,540,096	12,859,920
2	39,774	103,032	110,330	102,725	106,290	1,426,968	1,511,064	3,302,784	12,197,520
3	33,634	84,488	66,220	62,215	66,330	1,185,480	1,247,040	2,666,304	9,588,960
4	38,230	102,160	92,325	87,905	88,995	1,126,224	1,108,368	2,350,944	8,323,200
5	38,622	99,952	87,365	83,520	84,930	1,213,272	1,213,056	2,580,768	9,305,280
6	33,550	88,136	100,145	95,665	96,665	1,195,488	1,178,856	2,524,896	9,035,280
7	36,268	93,608	88,130	86,630	89,615	1,314,072	1,313,424	2,786,688	10,115,280
8	48,734	125,328	118,470	109,495	114,355	984,888	1,012,824	2,173,248	7,909,920
9	32,278	83,512	86,160	80,320	86,565	960,120	974,592	2,113,056	7,598,160
10	29,358	75,992	61,820	59,315	61,230	831,600	858,960	1,810,944	6,511,680
11	34,794	89,392	61,210	57,330	61,585	1,708,128	1,832,616	3,961,440	14,446,080
12	38,746	103,216	70,590	67,100	70,070	1,573,560	1,635,264	3,545,856	12,785,040
13	34,902	92,528	69,570	66,115	68,955	1,616,616	1,711,224	3,710,592	13,447,440
14	32,942	88,104	67,415	64,100	67,810	1,681,560	1,753,056	3,771,072	13,757,760
15	27,702	72,768	67,965	64,550	66,800	1,719,216	1,764,144	3,889,152	14,406,480
16	17,362	44,304	90,080	83,850	90,200	1,998,936	2,127,240	4,728,384	17,434,800
17	21,884	56,880	54,305	52,130	55,150	1,477,872	1,596,384	3,479,328	12,717,360
18	33,814	87,784	67,480	64,620	66,215	1,545,264	1,609,200	3,500,064	12,630,960
19	33,274	86,512	72,285	68,355	71,130	1,808,424	1,874,952	4,072,608	15,118,560
20	34,816	90,680	68,400	66,040	68,800	1,829,520	1,899,360	4,114,080	15,009,840
21	33,548	86,344	67,750	64,385	67,905	1,850,616	1,881,792	4,110,624	14,736,240
22	32,704	83,056	91,500	88,195	89,130	1,788,192	1,867,896	4,148,064	15,380,640
23	17,834	46,776	116,985	112,320	115,225	1,786,176	1,898,280	4,153,536	15,371,280
24	25,986	65,488	70,400	66,965	69,735	1,766,376	1,904,328	4,163,040	15,274,080
25	36,758	95,168	97,170	93,440	96,770	1,790,568	1,854,216	4,000,032	14,470,560
26	37,212	96,280	80,530	76,610	79,355	1,750,176	1,829,664	3,995,136	14,536,800
27	36,546	92,904	92,780	88,745	91,585	1,793,952	1,837,368	3,972,960	14,518,080
28	30,404	74,408	88,705	86,040	85,410	1,902,456	1,909,872	4,184,928	15,112,800
29	41,662	106,376	95,315	92,645	93,585	1,805,400	1,847,808	4,074,912	15,085,440
30	33,362	86,784	109,120	103,505	107,510	1,704,672	1,802,232	4,039,776	14,836,320
31	34,678	87,168	85,160	80,745	85,620	1,794,384	1,865,016	4,047,840	14,834,880
Total	1,046,956	2,707,272	2,564,375	2,442,780	2,533,740	48,532,680	50,352,912	109,513,152	399,356,640

**Table 38. Southern Field Division Energy Data**

(in kWh)

**May 2004**

Date	West Branch			East Branch			
	Oso Pumping Plant Load	Warne Powerplant Generation	Castaic Powerplant SWP Generation	Alamo Powerplant Generation	Pearblossom Pumping Plant Load	Devil Canyon Powerplant Generation	Mojave Siphon Powerplant Generation
1	477,232	1,147,968	1,560,000	401,408	2,368,428	3,768,576	287,301
2	464,688	910,728	1,560,000	389,396	2,183,172	3,725,088	265,020
3	269,920	693,360	840,000	347,816	2,113,668	3,695,808	251,391
4	172,200	282,744	840,000	341,264	1,794,984	3,617,184	207,459
5	226,016	462,816	840,000	372,232	1,964,700	3,871,968	232,701
6	227,136	423,360	840,000	336,420	1,881,660	3,616,704	217,350
7	229,824	320,040	840,000	390,320	2,100,996	3,617,088	258,006
8	6,160	94,680	0	393,484	2,196,432	3,844,512	267,456
9	6,160	0	0	364,756	2,026,596	3,564,960	234,990
10	33,320	0	0	106,316	1,673,808	3,673,632	203,637
11	697,200	1,367,568	2,520,000	0	1,885,380	3,834,432	193,851
12	725,424	1,607,760	2,520,000	0	2,079,360	3,811,296	246,771
13	614,544	1,452,168	2,520,000	0	2,140,884	3,791,712	268,947
14	590,296	1,365,624	2,520,000	0	2,245,176	3,845,664	246,141
15	711,760	1,320,552	2,520,000	0	2,220,492	3,878,592	283,059
16	936,544	1,533,744	2,520,000	0	2,436,540	3,976,224	283,080
17	511,112	1,246,032	2,880,000	0	2,179,704	3,960,288	254,625
18	689,472	1,736,136	2,880,000	0	1,950,852	3,877,152	246,477
19	798,560	1,582,560	2,880,000	139,888	2,141,856	3,892,704	234,864
20	732,872	1,753,488	2,880,000	409,276	2,251,512	4,008,672	269,787
21	799,624	1,718,064	2,880,000	387,856	2,159,196	3,784,800	241,857
22	794,360	1,801,296	2,880,000	409,024	2,238,996	4,074,528	256,494
23	794,696	1,725,624	2,880,000	419,244	2,253,996	3,986,400	240,555
24	784,224	1,711,440	2,880,000	404,880	2,264,904	3,785,088	270,102
25	784,000	1,640,088	2,880,000	378,084	2,080,560	3,804,576	243,621
26	784,672	1,450,728	2,880,000	381,248	2,107,092	3,819,264	235,494
27	784,168	1,591,632	2,880,000	381,752	2,075,076	3,854,976	259,245
28	785,680	1,723,608	2,880,000	404,208	2,121,348	3,862,752	246,288
29	819,336	1,570,680	2,880,000	393,036	2,180,772	3,990,048	248,052
30	788,256	1,662,480	2,880,000	417,508	2,076,012	3,923,808	246,834
31	857,080	1,749,312	2,880,000	393,232	2,073,300	4,024,416	241,668
Total	17,896,536	37,646,280	65,640,000	8,362,648	65,467,452	118,782,912	7,683,123